xSNOWTAM – UMAN

Digital SNOWTAM

Data User and Data Provider Interface

User's Guide & References Manual

Version 1.0

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1 Introduction

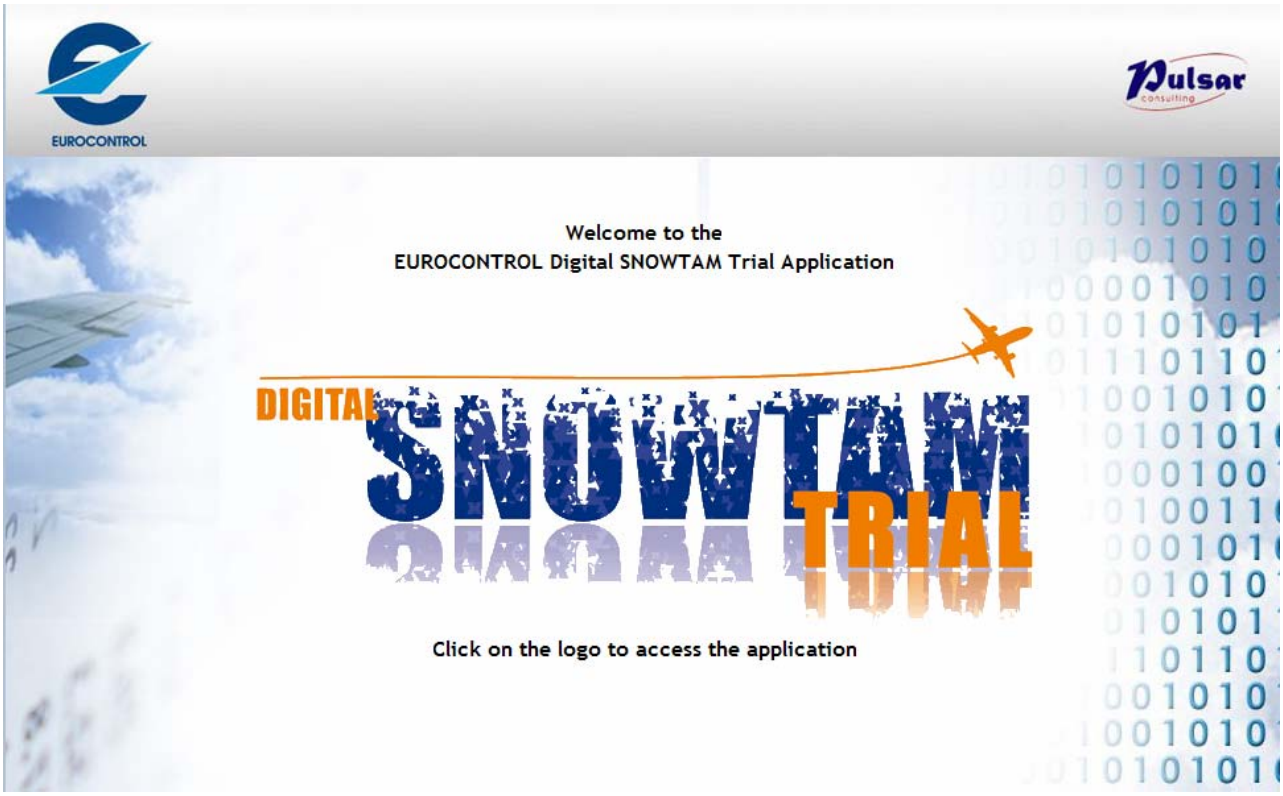


Figure 1 Home page

2 Disclaimer

[TODO EPR]

3 Data sets

The Digital SNOWTAM Application relies on multiple data sets.

3.1 Static data / baselines from EAD

The static data about airport features is exported from EAD/SDO in AIXM 4.5 format and is converted and imported in the application in AIXM 5.1 format.

The following features are available:

- Airport/heliports
- Runways
- Runway directions
- Runway centreline points (thresholds)
- Taxiways
- Aprons
- Aircraft stands

These features are regularly and automatically updated trough the EAD/ESI/ENA connection. It is not modifiable through the application.

Runway geometries are computed using the two thresholds.

3.2 Geometric data from AMDB

Feature geometries in AMDB format can be uploaded in the application. AMDB provides precise geometries for the following features:

- Runways (through runway elements)
- Taxiways (through taxiway elements)
- Aprons (through apron elements)

Runway geometries uploaded from AMDB will always have priority over geometries computed with threshold points.

AMDB files must be sent to EUROCONTROL via email. Validity tests against the features already available in the database will be run before the file can be uploaded.

EUROCONTROL will take care of the whole processing.

3.3 EAD SNOWTAM Messages

The application regularly and automatically receives ICAO SNOWTAM messages through EAD/INO and converts them into valid surface contaminations as soon as they are available.

The converter uses a set of rules to validate and translate SNOWTAM messages. This set of rules takes the ICAO Annex 15 – Annex II and many common variations into account.

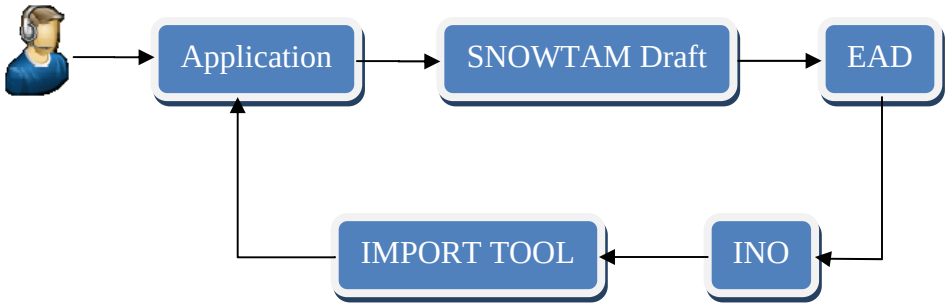
Despite the relative flexibility of the import tool, some SNOWTAM messages might be rejected. They will still be available in the application for further processing and fixing, but their contaminations won't be processed or available in the application. See 7.14 for additional information.

3.4 Local Contaminations

In addition to EAD SNOWTAM messages, the application also supports local contaminations.

During the trial, local contaminations can be provided by local airport authorities and/or NOTAM offices. This will allow data providers to encode test data directly within the application, with the help of wizards and graphical editing capabilities.

Local contaminations can coexist with EAD contaminations, as they are both considered as completely separate data sets. In other words, local and EAD contaminations won't impact each other. This will allow, for example, to use the application to encode and generate an ICAO SNOWTAM draft, copy-paste it in EAD and see the result when the SNOWTAM comes back in the application from INO (as described in the following flow).



4 Accessing the application

The Digital SNOWTAM application is accessible via the Internet as a Web Application. You will therefore need a working Internet connexion in order to use it. On the other hand, as far as the technical requirements are fulfilled, no other third party software or components need to be installed on your computer.

4.1 Technical requirements

Internet Explorer 6/7 or Firefox 2 and greater is needed in order to use the web application.

All application screens have been developed to accommodate a minimum resolution of 1024x768. Note, however, that the application also supports higher screen resolutions to allow you to take full advantage of the graphical capabilities of the maps.

Memory requirements will vary greatly depending on your browser and configuration.

4.2 Request a login / user name

Access to the Digital SNOWTAM application is subject to (free) subscription.

[TODO LLS/EPR: explain subscription requirements]

This login will allow you to use the application either as a Data Provider or a Data User.

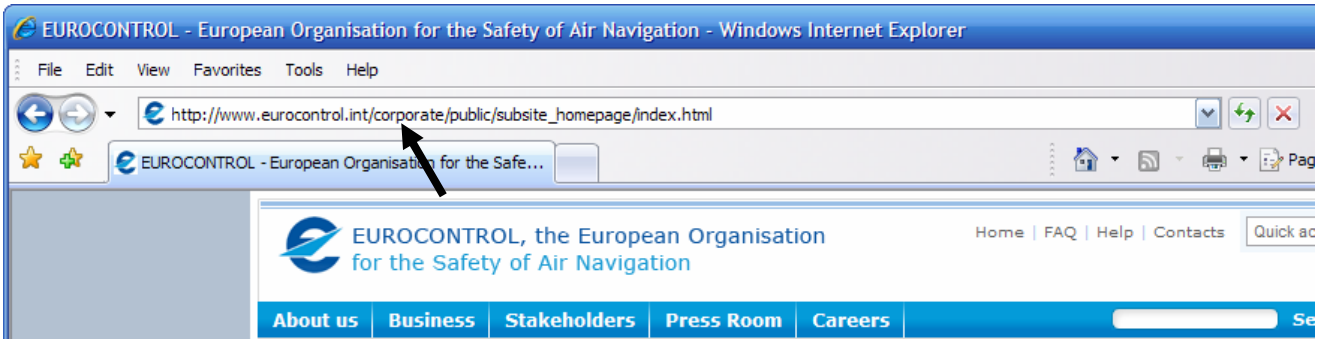
Basically, Data Users will have a read access to the data, while Data Providers will be allowed to encode new contaminations.

4.3 Accessing the application

The Digital SNOWTAM Application is accessible through EUROCONTROL's Portal at the following address:

https://... [LLS/EPR Add application URL]

Type the address in your browser's address bar:


EUROCONTROL - European Organisation for the Safety of Air Navigation - Windows Internet Explorer
File Edit View Favorites Tools Help
http://www.eurocontrol.int/corporate/public/subsite_homepage/index.html
EUROCONTROL - European Organisation for the Safe...
EUROCONTROL, the European Organisation for the Safety of Air Navigation
Home | FAQ | Help | Contacts
About us
Business
Stakeholders
Press Room
Careers

4.4 Login

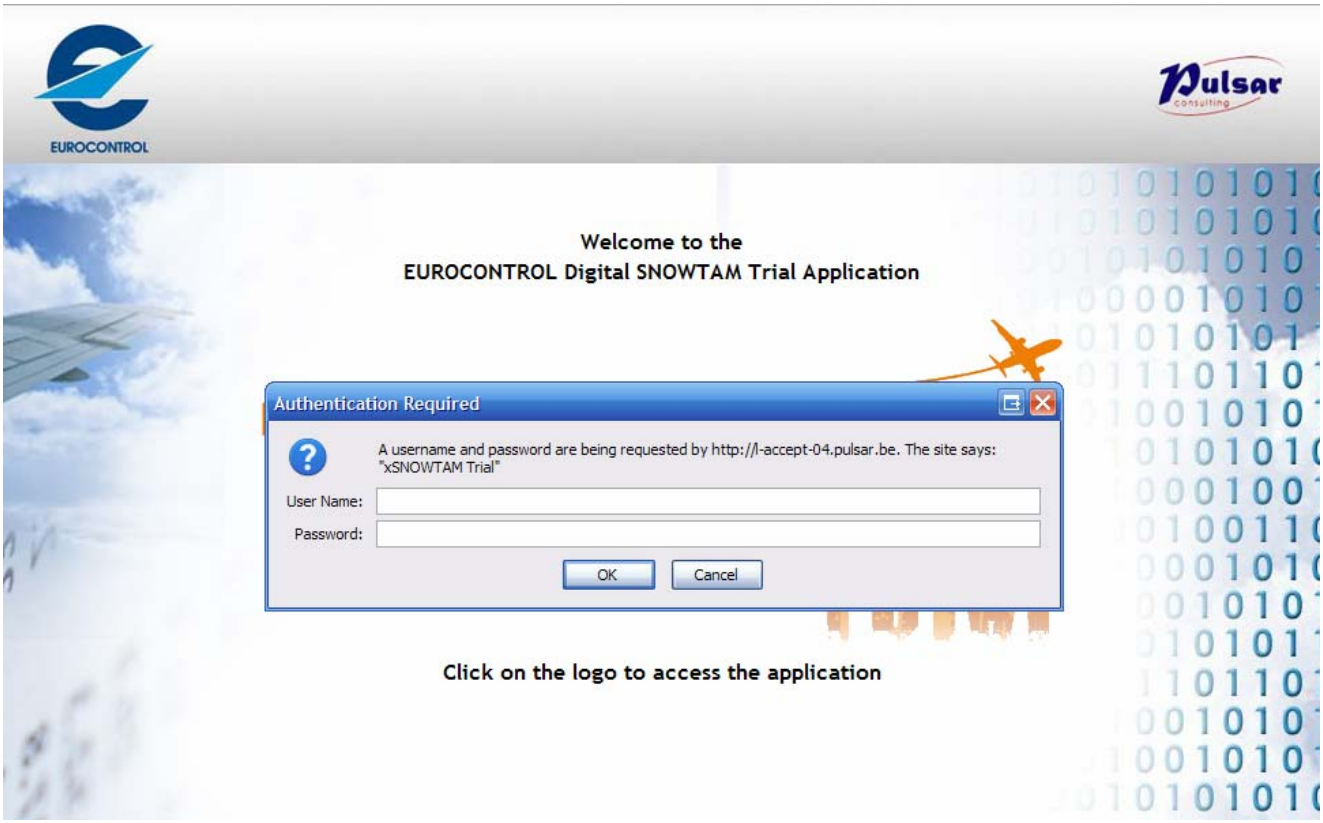


Figure 2 Login dialog

[LLS/EPR/FPR: check with EC for login method in Portal]

5 Symbols and Graphical Representations

Aeronautical experts have investigated the existence of civil, military and other industry conventions and standards that provide requirements or guidelines for the graphical representation of the surface contamination status.

5.1 Features

Features for which geometries are available are displayed graphically on a map. Both features represented by a surface and features represented by a point are supported.

Airport features represented by a surface are displayed using an outlined blue polygon (the shape is not filled). This is the case for runways, taxiways and aprons.

Airport features represented by a point (aircraft stands, thresholds...) are displayed using an icon depending on their type.

5.1.1 Airport Reference Point

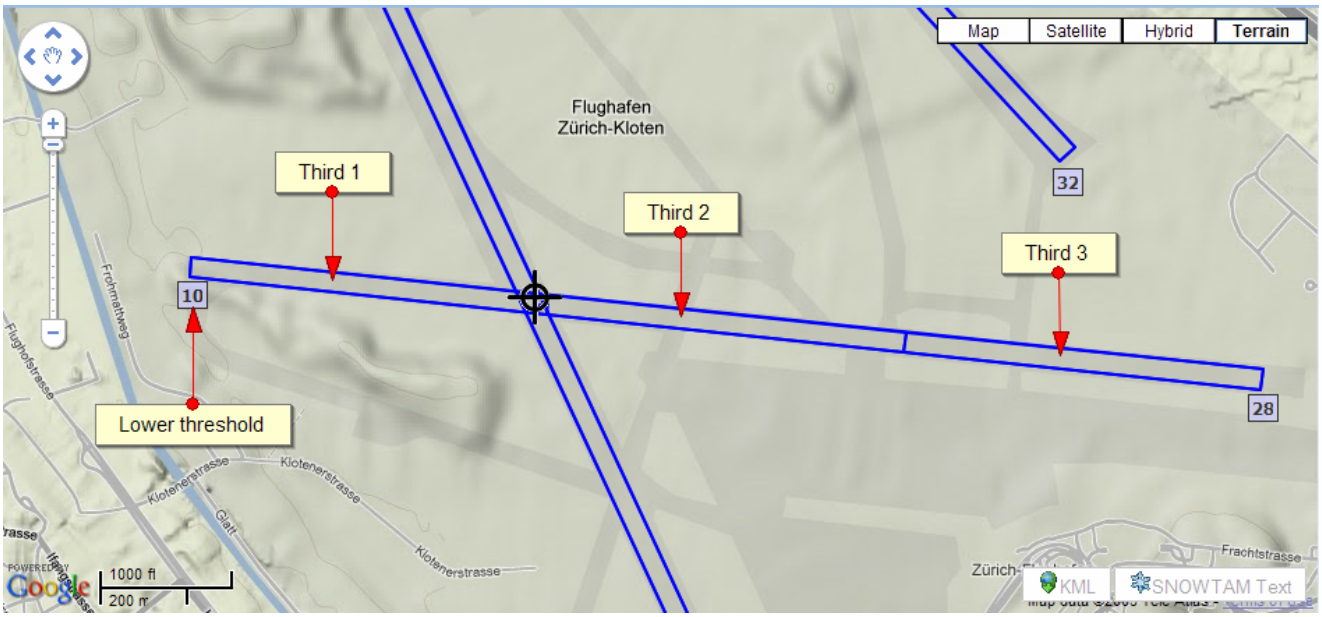
The airport reference point is displayed using the usual ICAO symbol:

The graphical visualization of SNOWTAM messages and contaminations relies heavily on features geometries. If no geometries are available, a warning shall be displayed under the reference point.

5.1.2 Runways

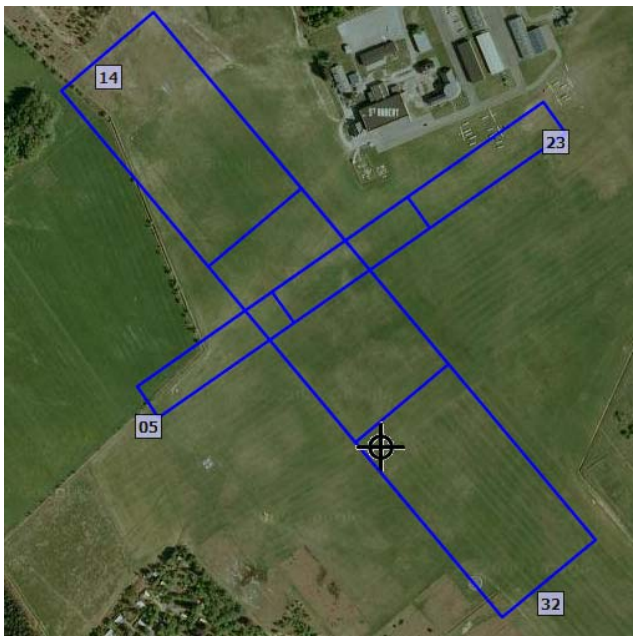
Runways are displayed as outlined blue polygons.

In order to be compliant with ICAO Annex 15 – Appendix 2 and OPADD document for the encoding of contaminations and SNOWTAM messages, runways are divided into *thirds*. The thirds are numbered from the lower runway designator / threshold:



When no AMDB data is available, runway geometries are computed by using the two threshold point's coordinates and the published runway width. So, at the very least, runway thresholds should be available in EAD to be able to visualize runways.

It may happen that, for some airports, the runway geometry doesn't match the picture of the runway on the map:



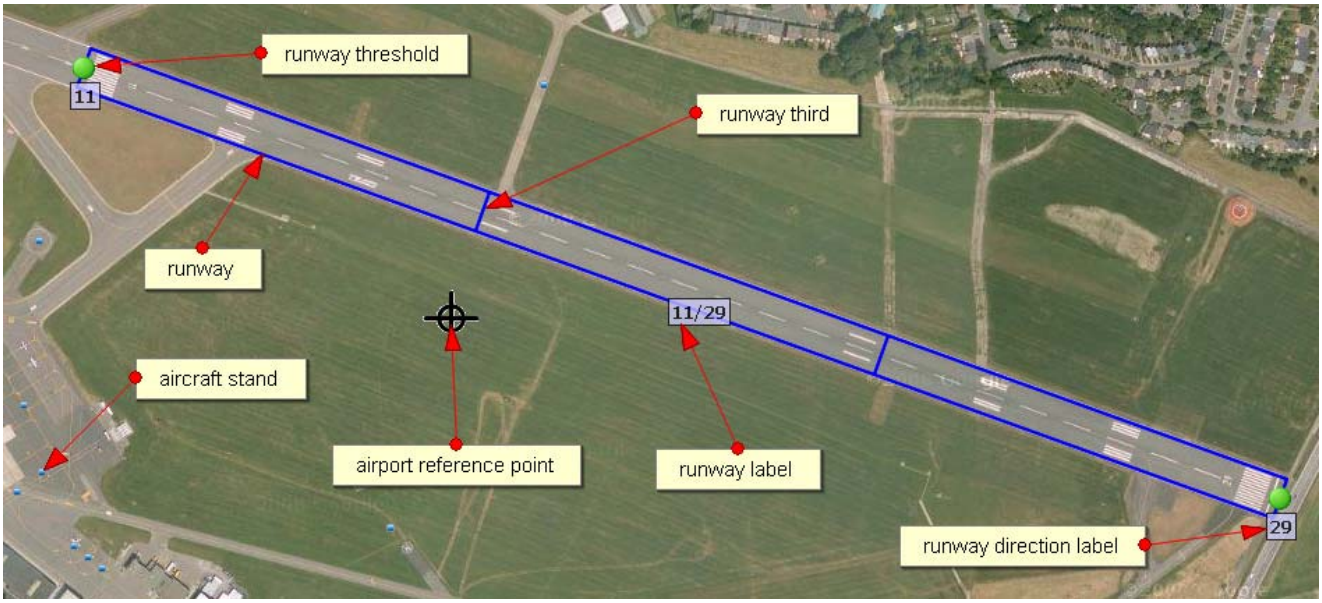
This may be due to:

- An incorrect runway width in EAD
- No runway width (in which case a default value of 45 meters is used)
- Wrong threshold coordinates or displaced thresholds [TODO check with EPR]
- No threshold and no AMDB data available (in which case the application can't display the runway)
- Maps of type 'Terrain' and 'Map' may be less precise than the satellite map (and thus the displayed picture may appear shifted)

If needed, the information can be corrected or completed in EAD and sent as an update, which the application will take into account automatically.

Here's a sample representation of a runway, displaying:

- The runway itself (the blue box)
- runway thirds
- runway thresholds
- runway label and threshold labels



5.1.3 Taxiways

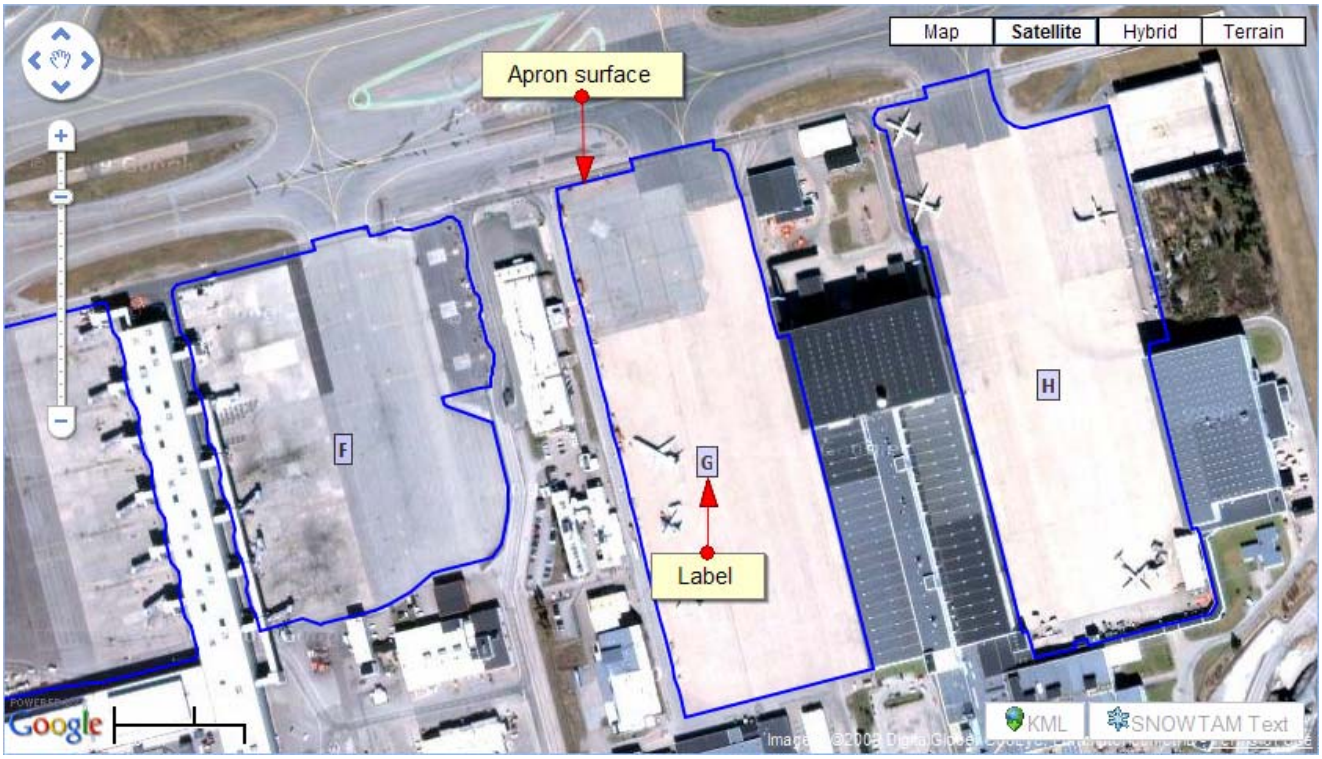
Taxiways are displayed as outlined blue polygons.

Here's a sample view of several taxiways on an airport:

Taxiway geometries are only available through AMDB data. If such data is available, send the AMDB file for the corresponding airport to EUROCONTROL in order to take advantage of this functionality.

5.1.4 Aprons

Aprons are displayed as an outlined blue polygon.



Apron geometries are only available through AMDB data. Send an AMDB file for the corresponding airport to EUROCONTROL in order to take advantage of this functionality (see chapter "3.2 Geometric data from AMDB" on page 8).

5.1.5 Aircraft Stands

Aircraft stands are displayed as blue dot shaped icons.

Here's a sample representation of some aircraft stands.

In order to avoid overloading the map, aircraft stands labels are not displayed as other feature labels. The labels with the stand designator are displayed when the mouse moves over a stand.

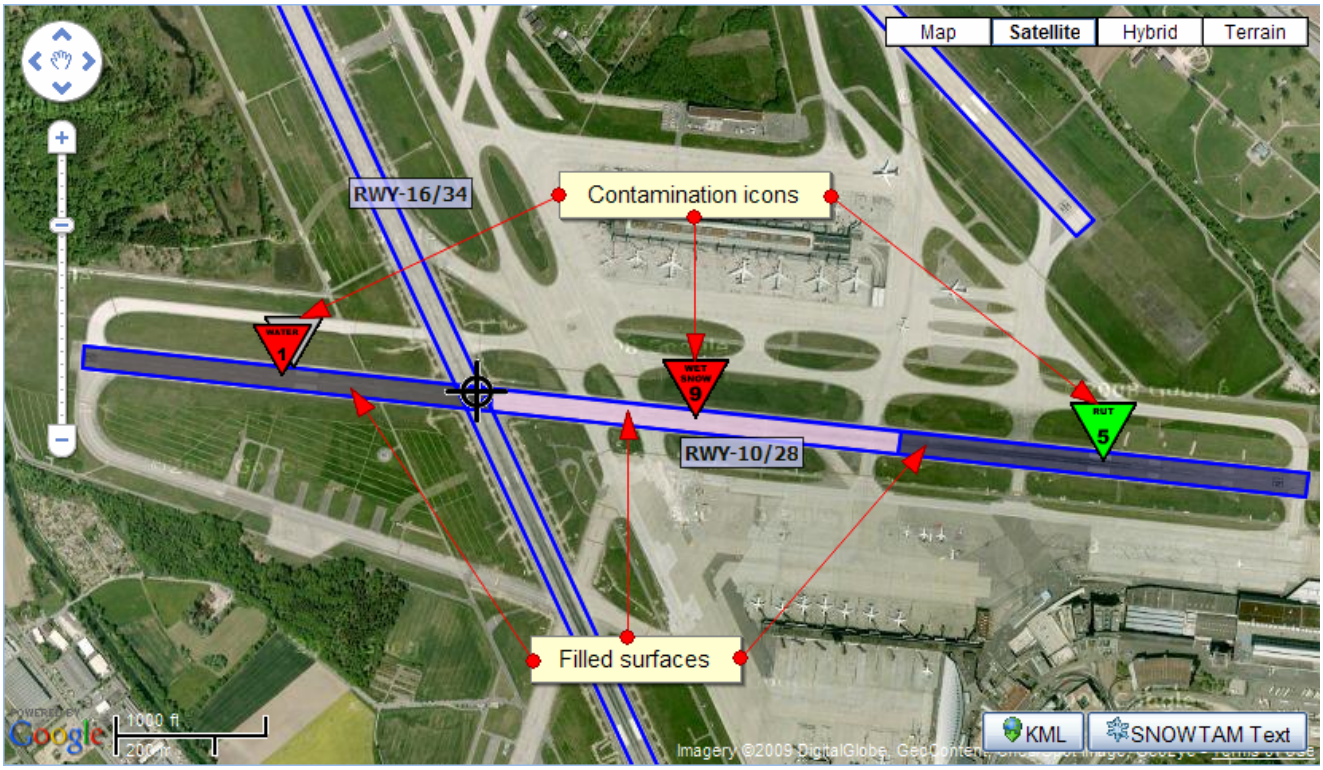
Aircraft stands are made available from EAD data.

5.2 Contaminations

Feature contaminations are displayed in two ways:

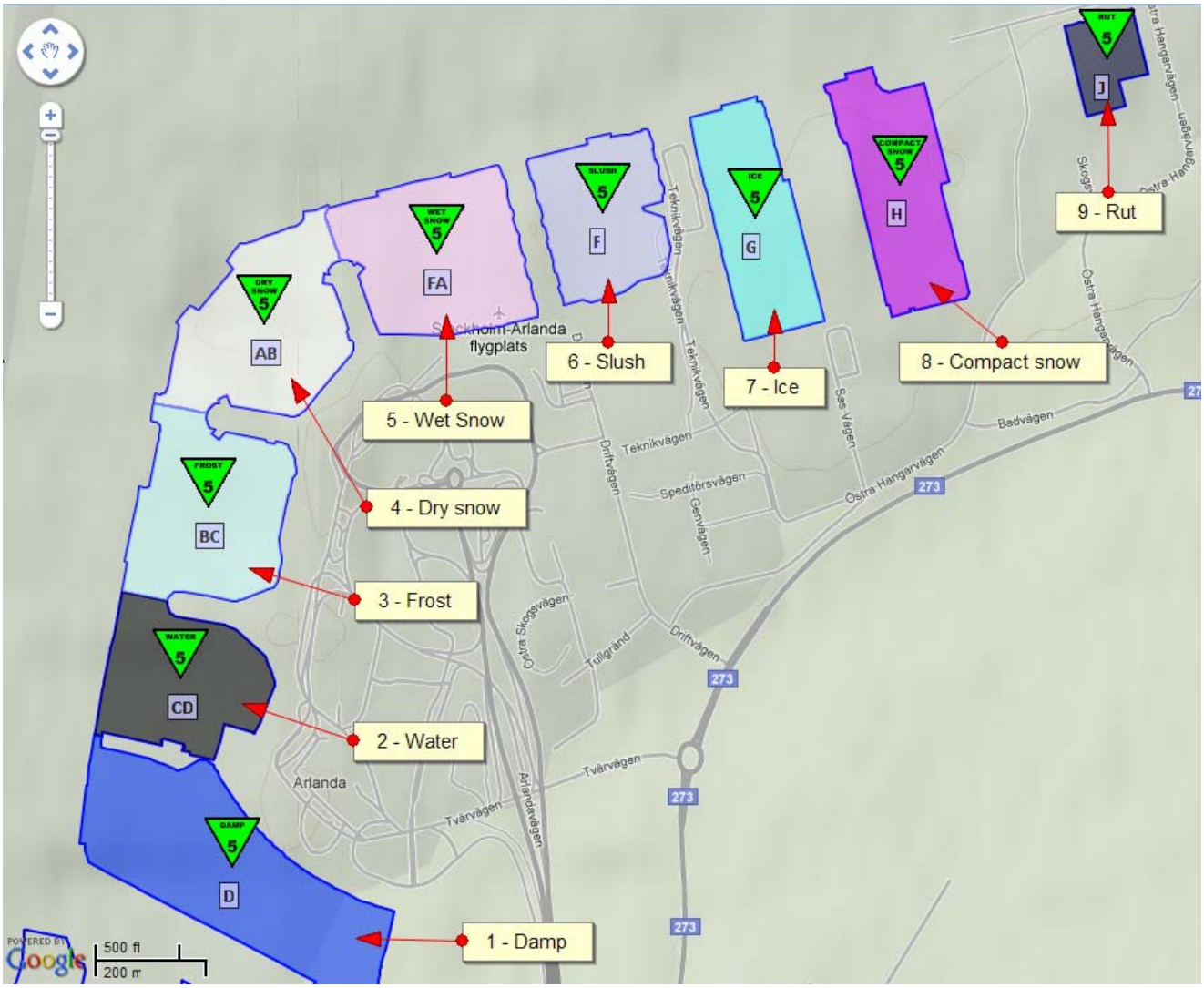
1. The **surface** of the feature is filled with a color corresponding to the contaminant of the upper layer

2. A color-coded and triangle shaped **icon** is placed on the feature, showing the most important information: the friction coefficient and the type of contaminant of the upper layer



5.2.1 Contamination surface

When features are contaminated, their surface is filled using a semi-transparent color which corresponds to the type of the upper most layer of contaminant:



While not displayed graphically, the other contaminants are still available in the view/edit dialogs in the application;

As an example, consider item F) of the following SNOWTAM message:

```
A)LSZH B)09280852 C)10 F)27/5/9
```

The 1st third of the runway is contaminated by water over ice (value **2**7), only the water layer is visible for this third

5.2.2 Contamination icon

The contamination icon carries the most important information about the contamination of the corresponding feature:

- Single or multiple layers
- Type of contaminant of the top layer
- Friction coefficient (textual number and color code)

It is meant to be a visual quick summary of the contamination.

5.2.2.1 Single and multiple layers

A single triangle is used when there is a single layer of contamination (one single contaminant):

Figure 3 Single layer contamination icon

When the contamination consists in multiple layers of contaminants, the icon is displayed as a double triangle.

Figure 4 Multiple layer contamination icon

Important notice: the number of triangles does NOT depict the number of layers.

5.2.2.2 Type of contaminant

The icon contains the denomination of the upper most contaminant (the top layer).

5.2.2.3 Friction coefficient

The friction coefficient (aka braking action) is displayed using the following two conventions:

A number (1-5 or 9)
A background color (red, yellow, green or gray)

The number always corresponds to the **estimated** friction coefficient; even if the actual value contained in the SNOWTAM or contamination is measured (the real coefficient is still available in the application). The application uses the same conventions as the ICAO SNOWTAM form (except for the color):

Measured Coefficient	Estimated friction	Color

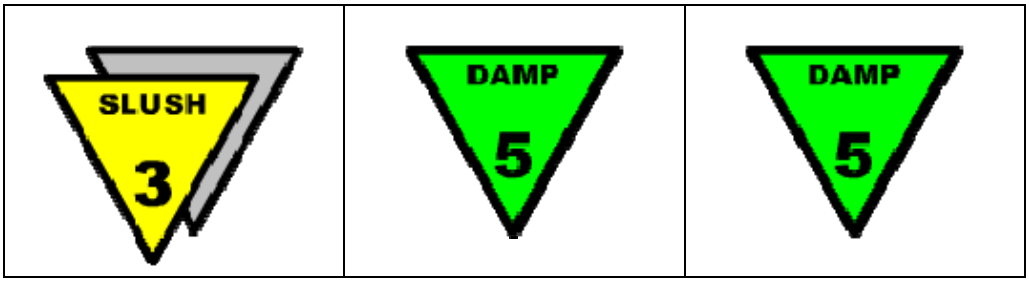
0.40 and above	GOOD	5	Green
0.39 – 0.36	MEDIUM/GOOD	4	Yellow
0.35 – 0.30	MEDIUM	3	Yellow
0.29 – 0.26	MEDIUM/POOR	2	Yellow
0.25 and below	POOR	1	Red
9 – unreliable	UNRELIABLE	9	Red

Grey color is used when no coefficient is available. However, this should not happen.

As an example, consider the following SNOWTAM message:

```
A) ENAT
B) 10290728 C) 11
F) 67/1/1 G) 4// H) 3/5/5
```

It will be displayed using the following icons:



6 Data User Interface

6.1 Introduction

As Data User, you have access to the Data User Interface, which provides read access to textual and graphical representations of features and contaminations for all airports[1], world-wide.

After login, no action is required on your side. The application will automatically direct you to the appropriate page.

Data Providers also have access to the Data User Interface. In fact, to allow maximum flexibility, the Data User and Data Provider Interfaces have been built together into a single application, with a single point of access. Most screens are common to both Interfaces. Depending on your access rights, you will have access to more or less functionalities.

It is certainly a good idea to read the following chapters about the Data User Interface even if you have Data Provider access!

6.2 Typical usage flow

The typical usage flow of the Data User Interface is as follows:

<table>
<tr><td>1.</td><td colspan="2">Login

Enter your login name and password</td></tr>
<tr><td>2.</td><td>Find airports

Find Airport Page
Quick Search Feature</td><td>Airport Overview

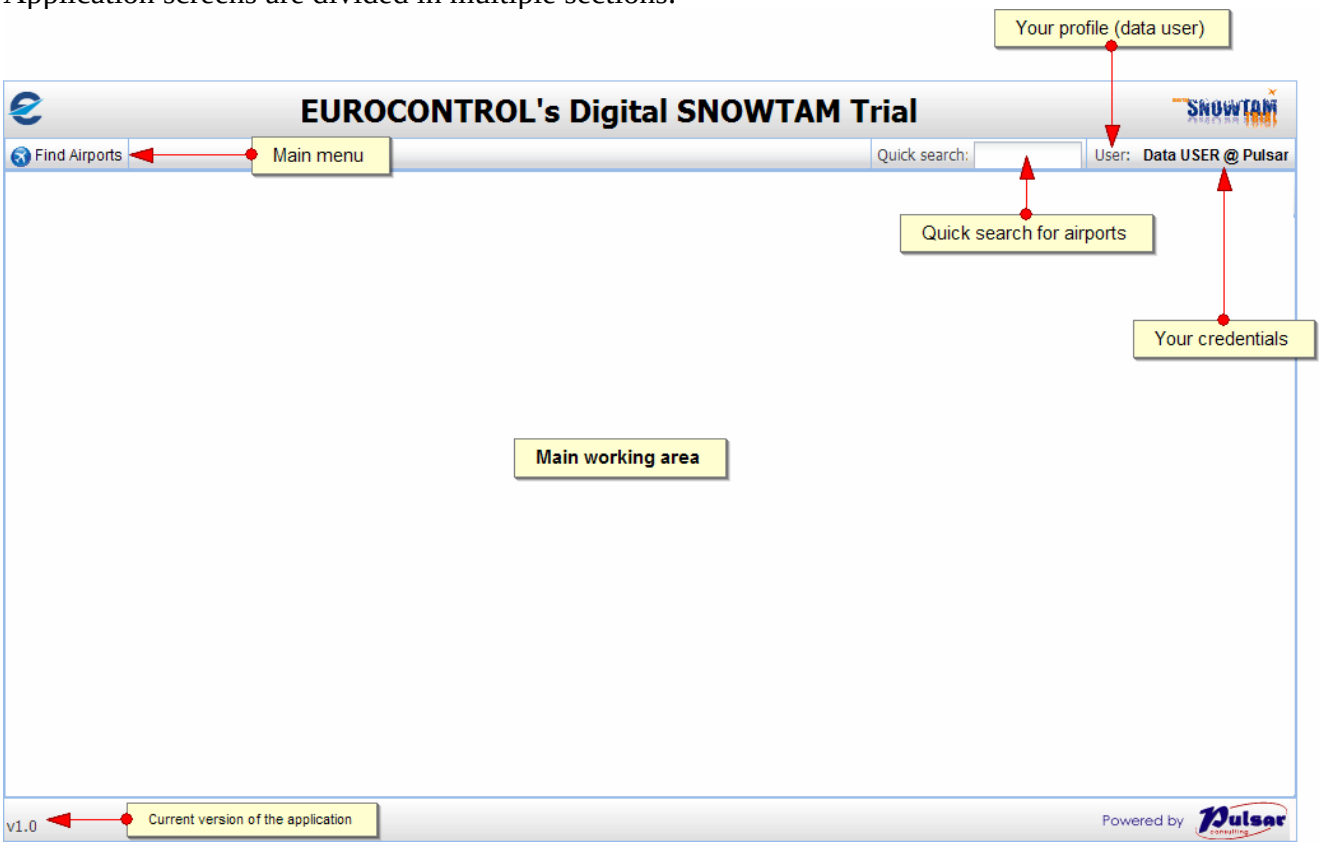
An overview of the current SNOWTAM situation, World-wide!</td></tr>
<tr><td>3.</td><td colspan="2">View airport contaminations

View the airport, its associated features and contaminations on a map</td></tr>
</table>

[1] More than 15000 airports are available through EAD export

6.3 Main screen layout

Application screens are divided in multiple sections:



6.3.1 Main menu

The Main menu is the heart of the navigation into the application. This is where you can choose the actions you want to perform within the application.

Each menu item can be clicked. This will load the requested page into the Main working area.

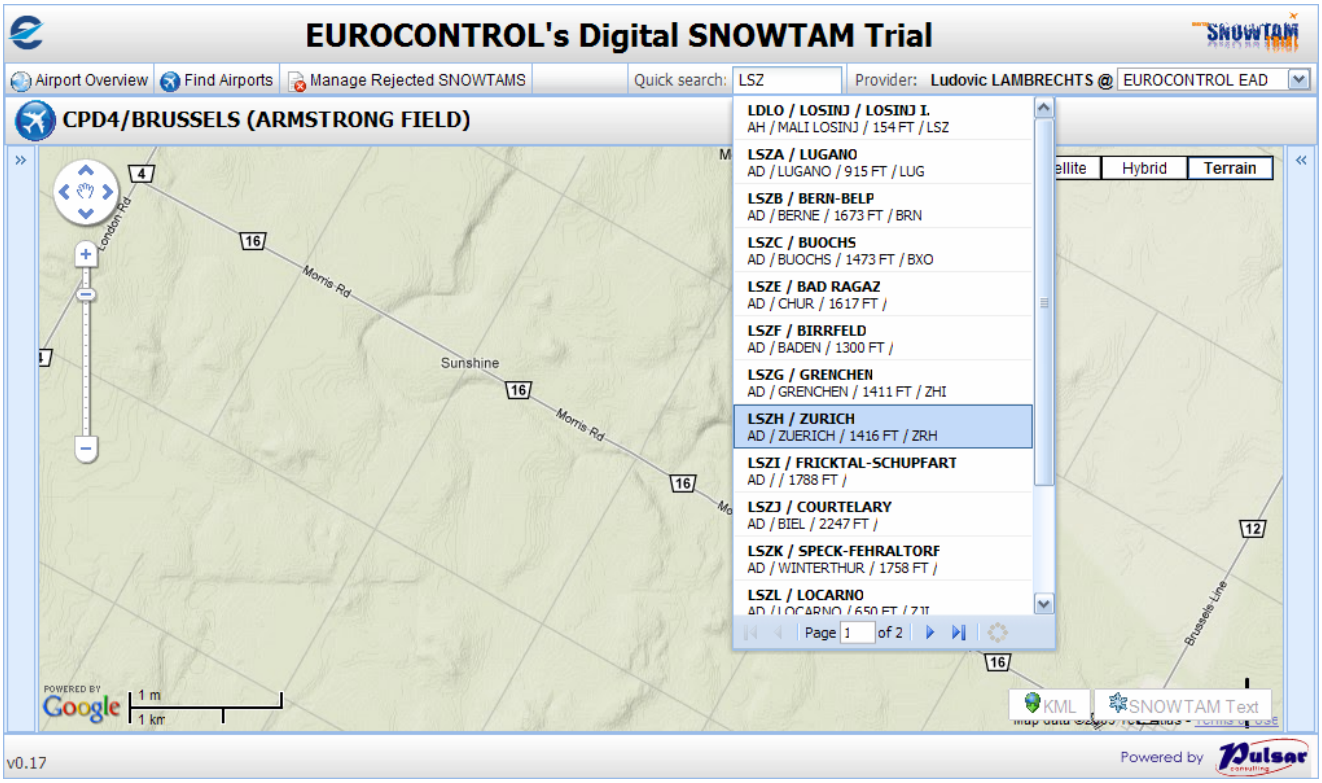
6.3.2 Main working area

The main working area is where the application pages are loaded.

6.3.3 Quick Search

The Quick Search feature is a convenient way to find airports very easily and quickly, based on ICAO/IATA designators and airport name. The selection of an airport will open the corresponding Airport Map page, which is used to display the contaminations.

Type any combination of characters to trigger the search (a minimum of 3 characters is required for the search to take place). The search results will contain all airports whose designators or name match the specified criterion:

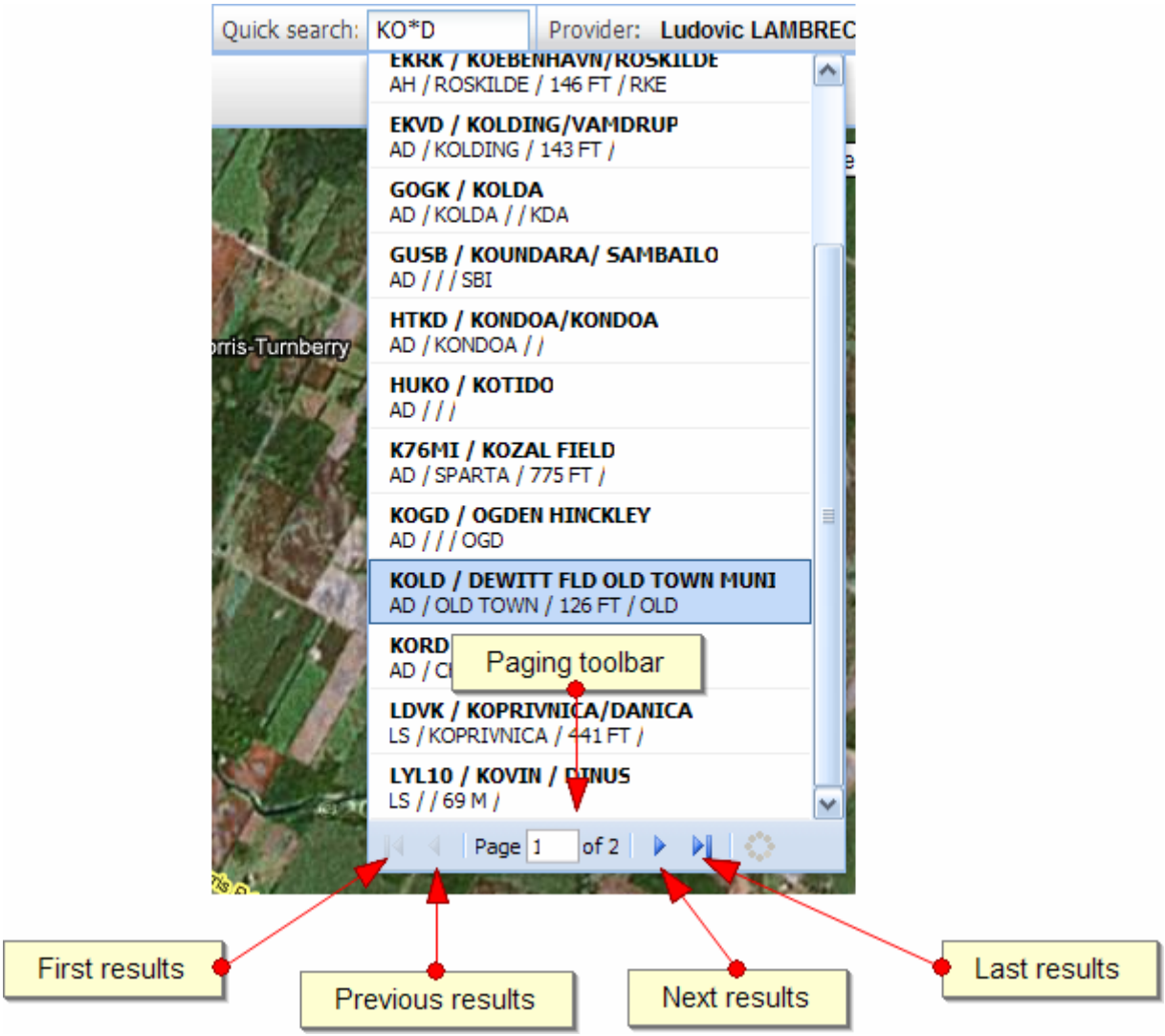

EUROCONTROL's Digital SNOWTAM Trial
Airport Overview
Find Airports
Manage Rejected SNOWTAMS
Quick search: LSZ
Provider: Ludovic LAMBRECHTS @ EUROCONTROL EAD
CPD4/BRUSSELS (ARMSTRONG FIELD)
LDLO / LOSINJ / LOSINJ I.
AH / MALI LOSINJ / 154 FT / LSZ
LSZA / LUGANO
AD / LUGANO / 915 FT / LUG
LSZB / BERN-BELP
AD / BERNE / 1673 FT / BRN
LSZC / BUOCHS
AD / BUOCHS / 1473 FT / BXO
LSZE / BAD RAGAZ
AD / CHUR / 1617 FT /
LSZF / BIRRFELD
AD / BADEN / 1300 FT /
LSZG / GRENCHEN
AD / GRENCHEN / 1411 FT / ZHI
LSZH / ZURICH
AD / ZUERICH / 1416 FT / ZRH
LSZI / FRICKTAL-SCHUPFART
AD / / 1788 FT /
LSZJ / COURTELARY
AD / BIEL / 2247 FT /
LSZK / SPECK-FEHRALTORF
AD / WINTERTHUR / 1758 FT /
LSZL / LOCARNO
Page 1 of 2
Hybrid
Terrain
Sunshine
Morris Rd
London Rd
Brussels Line
KML
SNOWTAM Text
v0.17
Powered by

This search field also support the '*' or '%' wildcard characters (replacing any group of letters).

Note that the Quick Search feature doesn't support temporal queries and that the Airport Map Page will always be opened with the current date and time.

Once the search results are displayed, you can navigate through the airport list with the keyboard (with up/down arrows) and press the RETURN key to select the airport. You can also use the mouse and click on the desired airport.

If the search results contain too many airports, they will be divided in multiples "pages" that can be browsed with the help of the paging toolbar at the bottom of the list:


Quick search: KO*D
Provider: Ludovic LAMBREC
EKRK / KOEBENHAVN/ROSKILDE
AH / ROSKILDE / 146 FT / RKE
EKVD / KOLDING/VAMDRUP
AD / KOLDING / 143 FT /
GOGK / KOLDA
AD / KOLDA / / KDA
GUSB / KOUNDARA/ SAMBAILO
AD / / / SBI
HTKD / KONDOA/KONDOA
AD / KONDOA / /
HUKO / KOTIDO
AD / / /
K76MI / KOZAL FIELD
AD / SPARTA / 775 FT /
KOGD / OGDEN HINCKLEY
AD / / / OGD
KOLD / DEWITT FLD OLD TOWN MUNI
AD / OLD TOWN / 126 FT / OLD
KORD
AD / C
LDVK / KOPRIVNICA/DANICA
LS / KOPRIVNICA / 441 FT /
LYL10 / KOVIN / DINUS
LS / / 69 M /
Page 1 of 2
Paging toolbar
First results
Previous results
Next results
Last results

Example search results:

Criterion	Results
LS	No results (minimum 3 characters needed)
LS*	All airports where designator ICAO or designator IATA starts with 'LS' (no airport name starts with 'LS'
LSZ	All airports where designator ICAO or designator IATA contains 'LSZ' (no airport name contains with 'LSZ')
LSZH	**LSZH**/Zurich (Zurich Airport, Switzerland)
BRUSSEL	All airports whose name contains 'BRUSSEL' (as ICAO and IATA designators have a max length of 4 characters, they will never match any criterion with more than 4 characters so, in that case, only the airport name is taken into account. 'BRUSSEL' will match the following airports: • CPD4 / **BRUSSEL**S (ARMSTRONG FIELD) • EBBR / **BRUSSEL**S/**BRUSSEL**S-NATIONAL

	• EBUB / **BRUSSEL**S/ULB • EBUC / **BRUSSEL**S/UCL

6.4 Find airports

The "Find airports" screen, always accessible through the "Find Airports" menu item, allows you to find specific airports and show if a SNOWTAM is active for each retrieved airport at 'query time'.

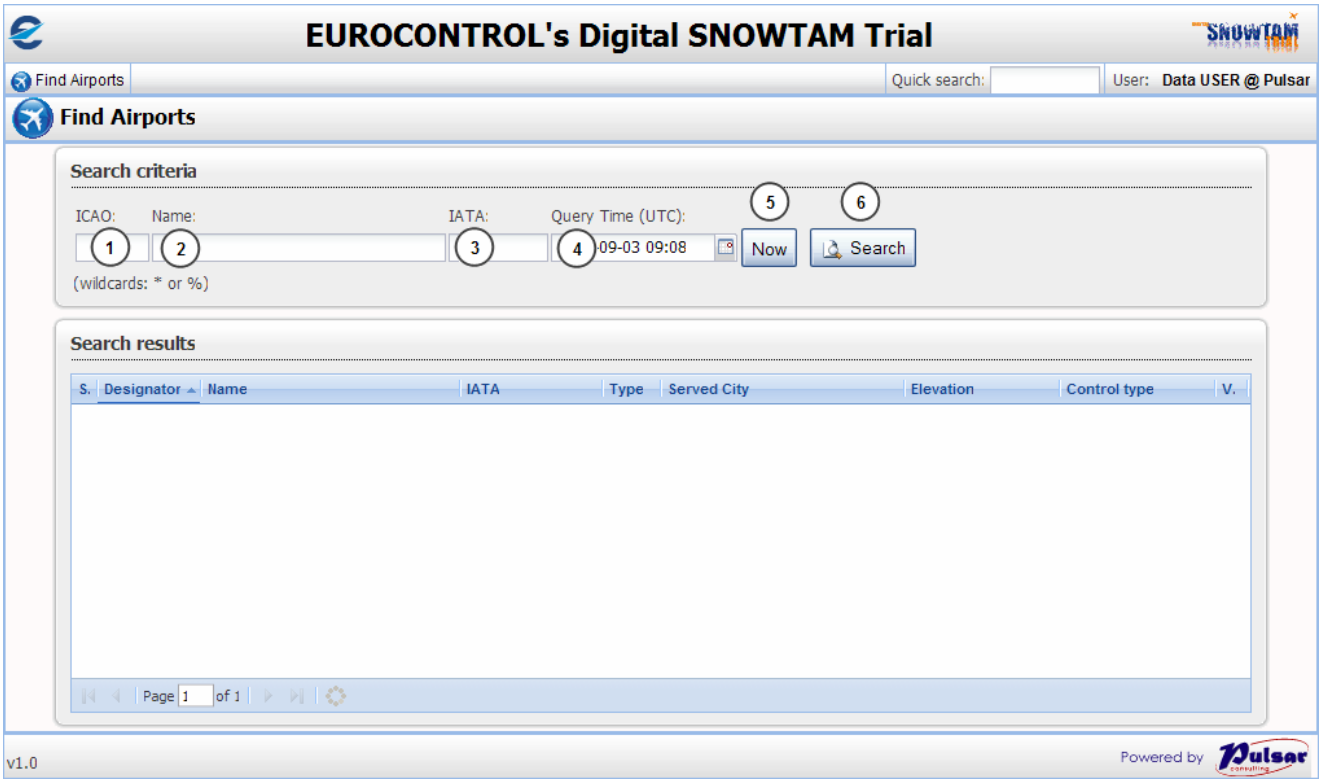


Figure 5 Find airport page for data users

6.4.1 Search criteria

Search for airports is allowed by:

- ICAO designator (1)
- Airport name (2)
- IATA designator (3)

All those search criteria accept the '*' and '%' wildcard characters (which stand for 'any group of character) both at the beginning and/or at the end of the criterion. Both characters have the same meaning and can be used indifferently, depending on your preference.

Examples:

- 'EB*' in ICAO field will find all airports whose designator ICAO starts with 'EB' (i.e. EBBR, EBOS...)

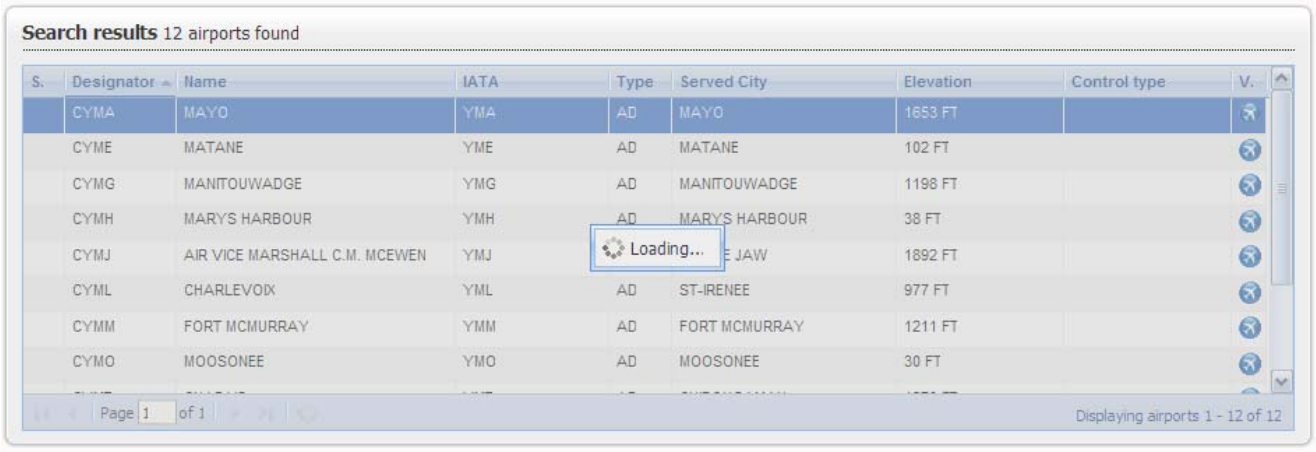
- '*STOCK*' in Name field will retrieve all airports whose name contains the word 'STOCK' (i.e. STOCKHOLM ARLANDA, STOCKTON METROPOLITAN, ...)

The "Query Time (UTC)" field (4) allows for historical searches. This field is used by the application to retrieve SNOWTAM information. It will also be used when displaying the Airport Map Page of the selected airport. By default, the field contains the current UTC date/time.

Clicking on the "Now" button (5) will reset the query time by retrieving the current UTC time from the server.

Click on the "Search" button or press the "RETURN" key in any field to do the search.

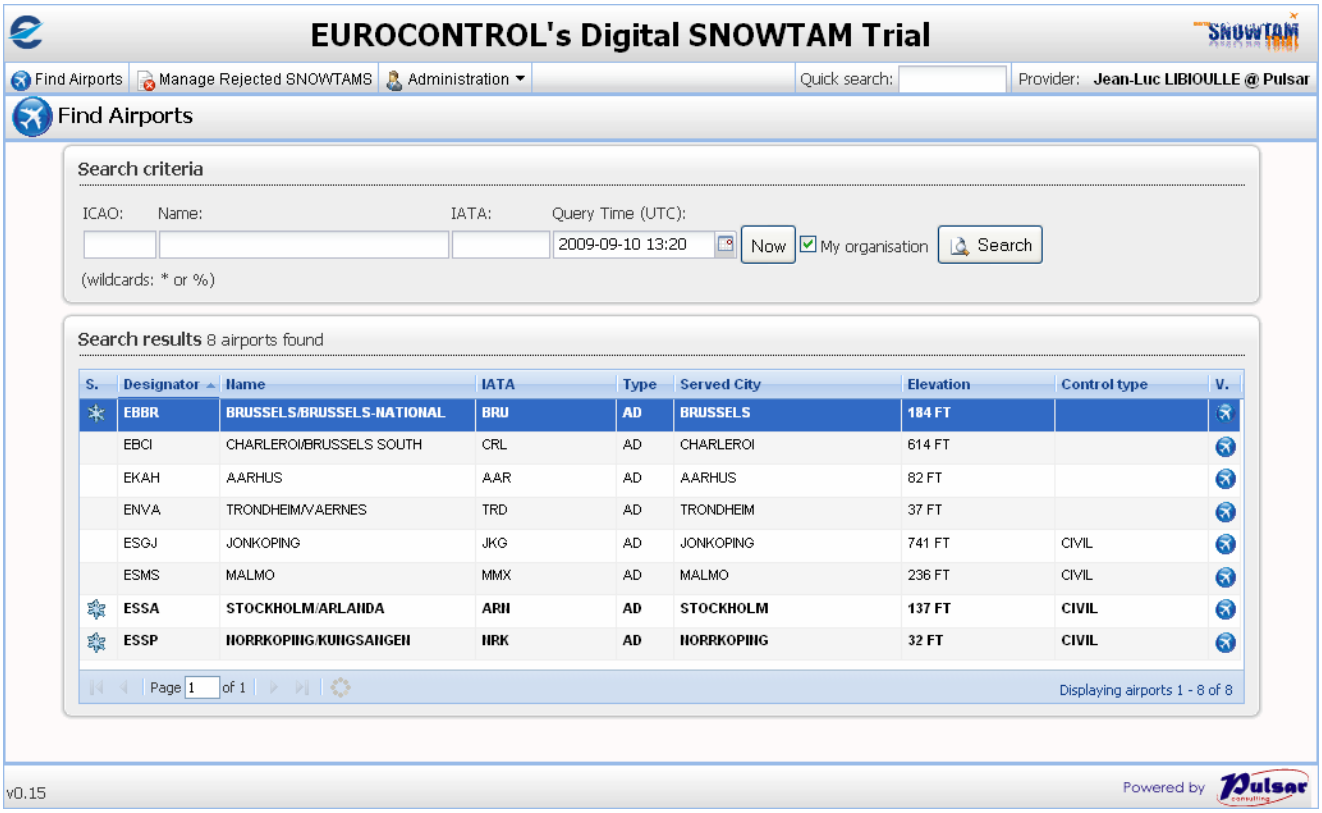
While the server processes the request, the result grid becomes disabled and a loading mask is displayed:


Search results 12 airports found
S.
Designator
Name
IATA
Type
Served City
Elevation
Control type
V.
CYMA MAYO YMA AD MAYO 1653 FT
CYME MATANE YME AD MATANE 102 FT
CYMG MANITOUWADGE YMG AD MANITOUWADGE 1198 FT
CYMH MARYS HARBOUR YMH AD MARYS HARBOUR 38 FT
CYMJ AIR VICE MARSHALL C.M. MCEWEN YMJ Loading... JAW 1892 FT
CYML CHARLEVOIX YML AD ST-IRENEE 977 FT
CYMM FORT MCMURRAY YMM AD FORT MCMURRAY 1211 FT
CYMO MOOSONEE YMO AD MOOSONEE 30 FT
Page 1 of 1
Displaying airports 1 - 12 of 12

When the results are available, the grid becomes enabled again and the first row is selected / highlighted.

6.4.2 Search Results

[TODO: produce this screenshot with final version, in DUI, add markers]


EUROCONTROL's Digital SNOWTAM Trial
Find Airports
Manage Rejected SNOWTAMS
Administration
Quick search:
Provider: Jean-Luc LIBIOULLE @ Pulsar
Find Airports
Search criteria
ICAO: Name: IATA: Query Time (UTC):
2009-09-10 13:20
Now
My organisation
Search
(wildcards: * or %)
Search results 8 airports found
S. Designator Name IATA Type Served City Elevation Control type V.
EBBR BRUSSELS/BRUSSELS-NATIONAL BRU AD BRUSSELS 184 FT
EBCI CHARLEROI/BRUSSELS SOUTH CRL AD CHARLEROI 614 FT
EKAH AARHUS AAR AD AARHUS 82 FT
ENVA TRONDHEIM/VAERNES TRD AD TRONDHEIM 37 FT
ESGJ JONKOPING JKG AD JONKOPING 741 FT CIVIL
ESMS MALMO MMX AD MALMO 236 FT CIVIL
ESSA STOCKHOLM/ARLANDA ARN AD STOCKHOLM 137 FT CIVIL
ESSP NORRKOPING/KUNGSANGEN NRK AD NORRKOPING 32 FT CIVIL
Page 1 of 1
Displaying airports 1 - 8 of 8
v0.15
Powered by Pulsar

The result table contains the list of airports/heliports matching the search criteria.

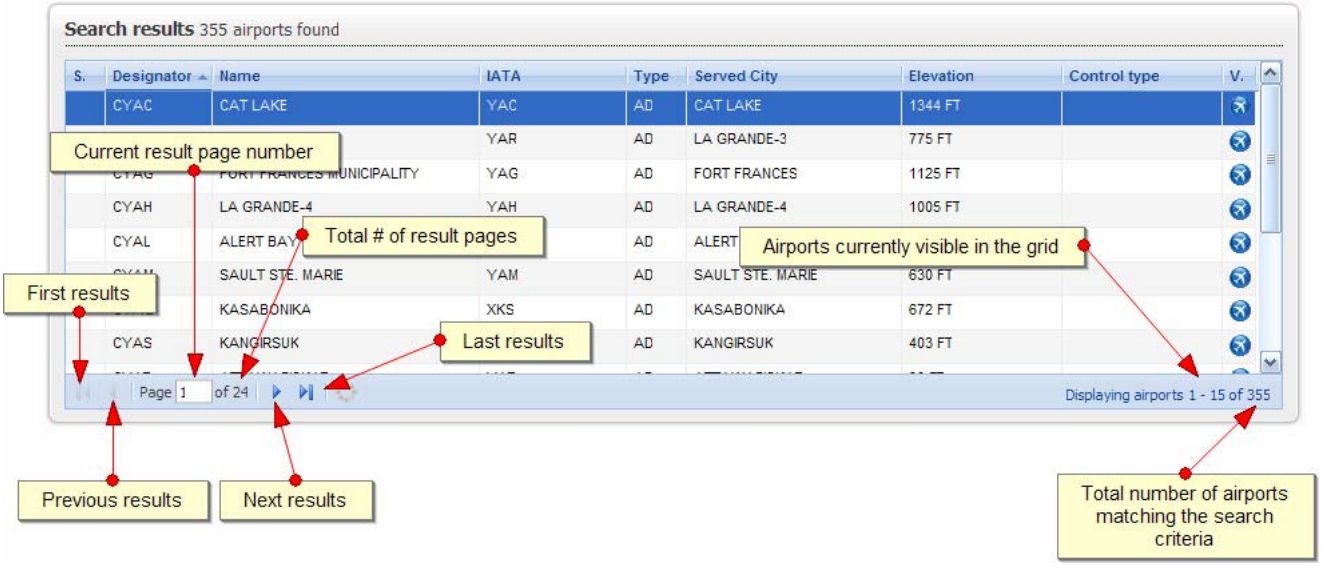
A row displayed in bold with a snowflake in the first column means that the corresponding airport/heliport has a valid/active SNOWTAM at the Query Time.

A single-click on the plane icon in the last column or a double-click on a row will open the Airport Map Page for the corresponding airport.

The result grid also supports keyboard navigation so it is also possible to use the up/down arrow keys to navigate through the results and press the RETRUN key to open the Airport Map Page of the highlighted airport/heliport.

> ***TIP**: if you know the airport designator, type it in the designator field, press the 'return' key, wait for the grid to load, press the 'return' key again. This will load the Airport Map Page for the corresponding airport, without using the mouse and without complicated handling. I.e.: 'EBBR', [Return], [Return].*

If the query returns too many results, the list of airports/heliports will be paginated (split in multiple pages). Navigating through multiple result pages is possible with the help of the navigation toolbar at the bottom of the grid:


Search results 355 airports found
S.
Designator
Name
IATA
Type
Served City
Elevation
Control type
V.
CYAC CAT LAKE YAC AD CAT LAKE 1344 FT
YAR AD LA GRANDE-3 775 FT
YAG AD FORT FRANCES 1125 FT
CYAH LA GRANDE-4 YAH AD LA GRANDE-4 1005 FT
CYAL ALERT BAY AD ALERT
SAULT STE. MARIE YAM AD SAULT STE. MARIE 630 FT
KASABONIKA XKS AD KASABONIKA 672 FT
CYAS KANGIRSUK AD KANGIRSUK 403 FT
Page 1 of 24
Displaying airports 1 - 15 of 355
Current result page number
Total # of result pages
Airports currently visible in the grid
First results
Last results
Previous results
Next results
Total number of airports matching the search criteria

6.5 Airport Overview

The "Airport Overview" screen shows a summary of the contamination status of a region for airports having at least one runway.

The view is initially centred on Europe.

The displayed airports are refreshed every time the map is moved or zoomed.

> **Note:** some airports might seem to be missing in the bottom of the map, especially at low zoom levels. This is due to the fact that our geographic queries take the earth curvature into account, but Google Maps doesn't (coordinates are projected).

6.5.1 Contamination summary icons

A contamination summary icon is associated to every airport. Click on the icon to open the airport in the Airport Map Page.
The table below illustrates the possible icon colours and their respective meaning:

Icon	Meaning
	No active contamination on the airport
	There exists contamination information but the deposits of all runways are set to NONE and the friction coefficient is "GOOD" or between 0.40-0.99 or unspecified
	There exists contamination information and the friction coefficient is "POOR", below 0.25 or "UNRELIABLE" for at least one of the runways
	All other situations including airport/heliport closed
	There exists a SNOWTAM but it has errors

Possible actions on the map:

- Change the map type using the map type selector.
- Zoom in, zoom out.
- Drag the map (move it using the mouse to show a different zone).
- "Hover" the cursor over a bullet to see the corresponding airport designator.
- Click on a bullet to open the airport page of the corresponding airport/heliport.

Performance issue:
There are more than 15000 airports/heliports in the database.

The number of bullets to calculate and display in this screen depends on the size of the geographical area to display, hence to the zoom level.

In addition, in some regions of the world, the high density of airports/heliports at some high altitude (zoom level) might make the map look cluttered. The bullets can be so close of each others that it's almost impossible to click on the right one.

For these reasons, only airports/heliports with more than one runway are selected.

6.6 Airport Map Page

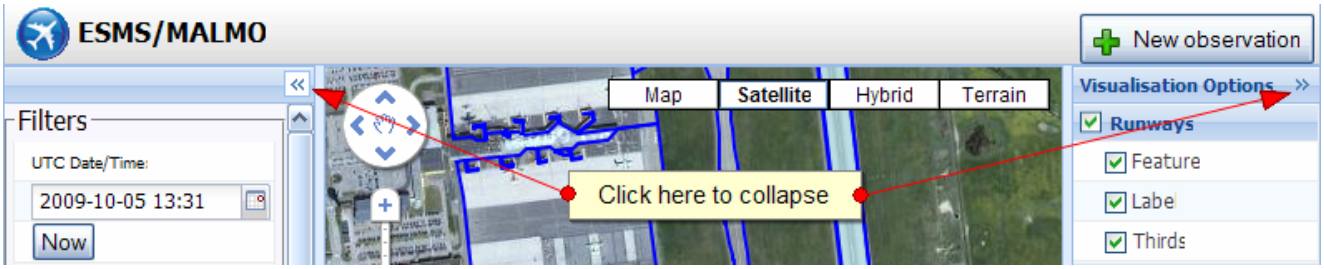
The Airport Map is the main screen of the application. It offers both textual and graphical view of airport features and contaminations.

	View	Create/Edit
Features	Yes	-
Contaminations	Yes	-

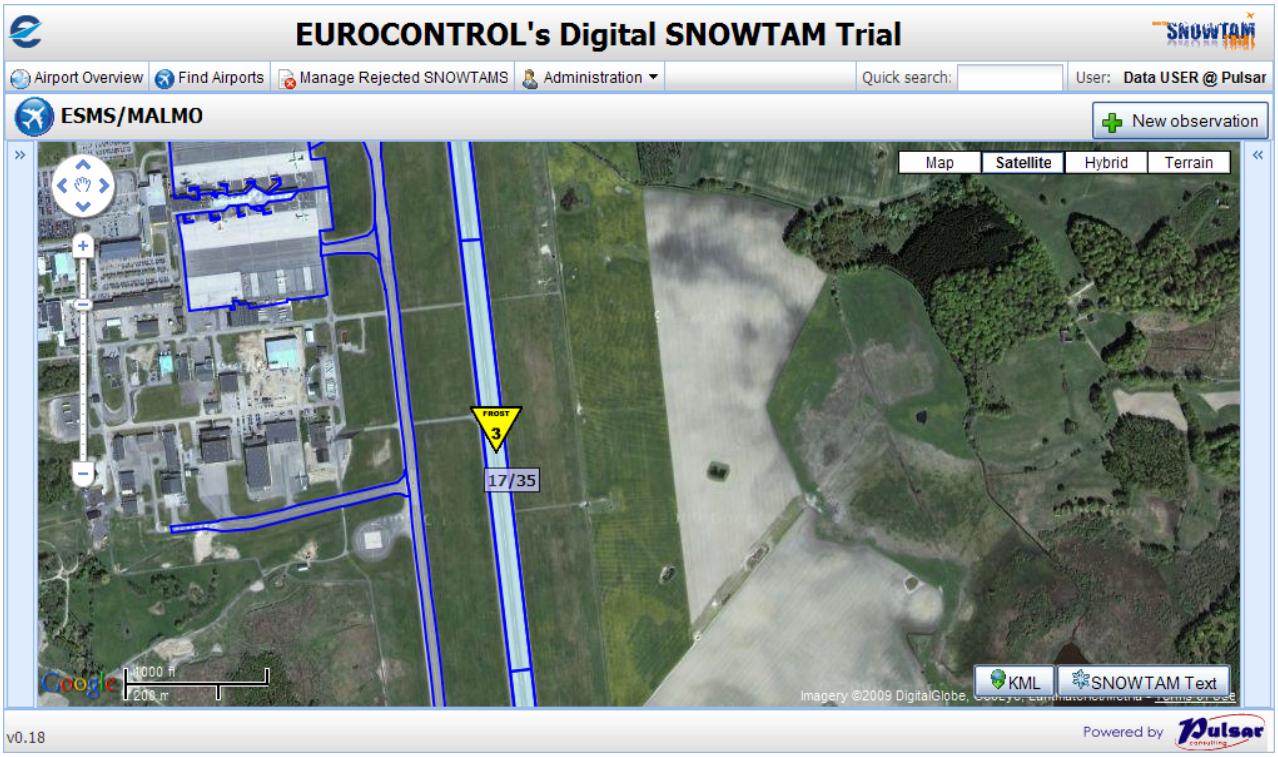
The screen is divided into four areas:

- Filters
- Airport features
- Airport map
- Visualisation options

The left and right columns (the "filters/airport features" and "visualization options" areas can be almost completely hidden to give more space to the map. This may come in handy with smaller screen resolutions.



Once collapsed, the panels become only a narrow vertical bar:



Click on the bar itself to reopen the panels temporarily (the panel will collapse back as soon as the mouse cursor moves over the map) or click on the little arrows on top of the bars to expand the panels normally.

Note that each panel can be collapsed and/or expanded individually.

6.6.1 Filters

Filters allow you to reload the map with a different query time or a different dataset. Datasets are further explained in section "3. Data sets" on page 8.

The first time the page is loaded, the dataset is selected using the following criterion:

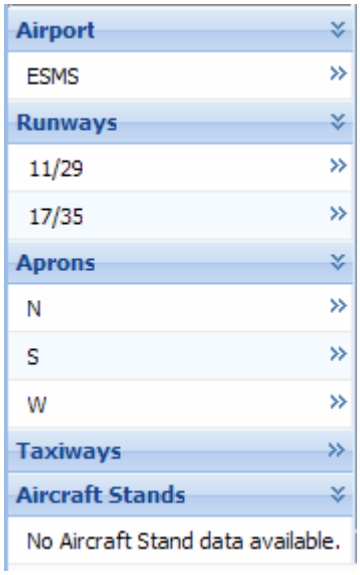
- 'Local' will be selected if the airport has local contaminations (encoded by a local authority)
- 'EAD' will be selected otherwise

If you select a different dataset, this dataset will be used once you apply the filter and the page is reloaded.

By default the UTC Date/time uses the value selected in the "Find airports" page or the current UTC date/time if you used the Quick Search feature or the Airport Overview page.

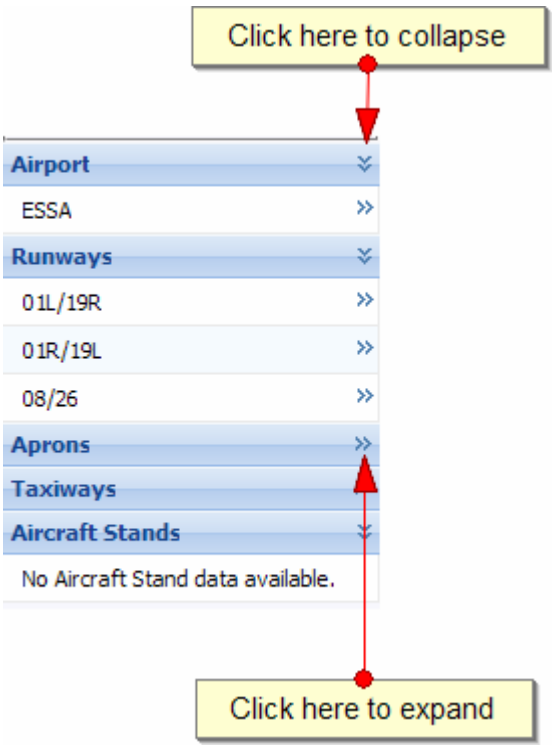
6.6.2 Airport features

The airport features area is a textual list of available features for the selected airport. Features are displayed by their designator / identification and are grouped by feature type:



Only the features available through EAD can be displayed here.

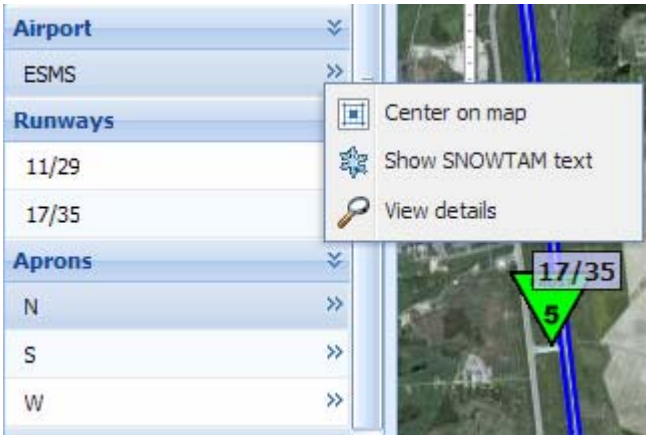
Feature groups (Airport, Runways, Aprons...) may be expanded or collapsed individually by clicking on the arrows on the right.



Click on the arrows on the right-hand side of feature designators to open a contextual menu which will allow you to interact with the corresponding feature (described below).

6.6.2.1 Airport feature

Click on the arrows icon on the right-hand side of the airport designator to open its contextual menu.



From the airport contextual menu you can:

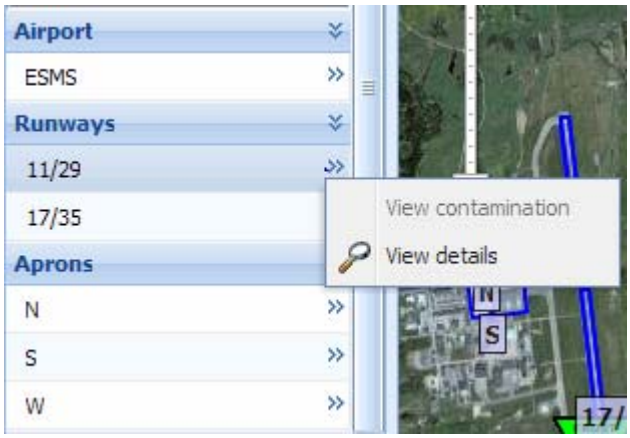
- Centre the map on the airport reference point
- Show the current SNOWTAM text (if available)
- View the currently active baseline details about the airport (this will open in a new popup)

Important notice: Currently, global information/contaminations about the whole airport are only available through the "View SNOWTAM" feature. This includes the content of item T (plain text remark). See chapter "6.6.5 Viewing SNOWTAM Text" page 38 for more information.

6.6.2.2 Other feature types

If the feature has a geometry that can be displayed, clicking on the designator will centre the map on the corresponding feature.

Click on the arrows icon on the right-hand side of the feature designator to open its contextual menu.



From the airport contextual menu you can:

- Show the current contamination (if any)
- View the currently active baseline details about the feature (this will open in a new popup)

When contaminations affect a specific feature, the corresponding contamination icon is also visible nearby the feature designator:

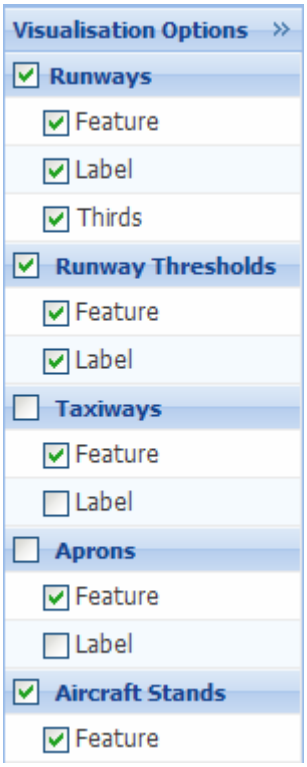
6.6.3 Airport Map

The Airport Map is the central piece of the application. It allows graphical visualization of airport features and contaminations (when available).

For more details about how features and contaminations are displayed on the map, please refer to chapter 5 "Symbols and Graphical Representations" on page 12.

6.6.4 Visualization Options

For some airports with a lot of feature geometries, the map can quickly become overloaded. The "Visualisation Options" panel gives you full control over what is visible on the map.



By checking/unchecking the boxes, you can show/hide the corresponding feature geometries and/or labels. The box nearby the feature type (Runways....) allow you to completely show/hide specific features in one click.

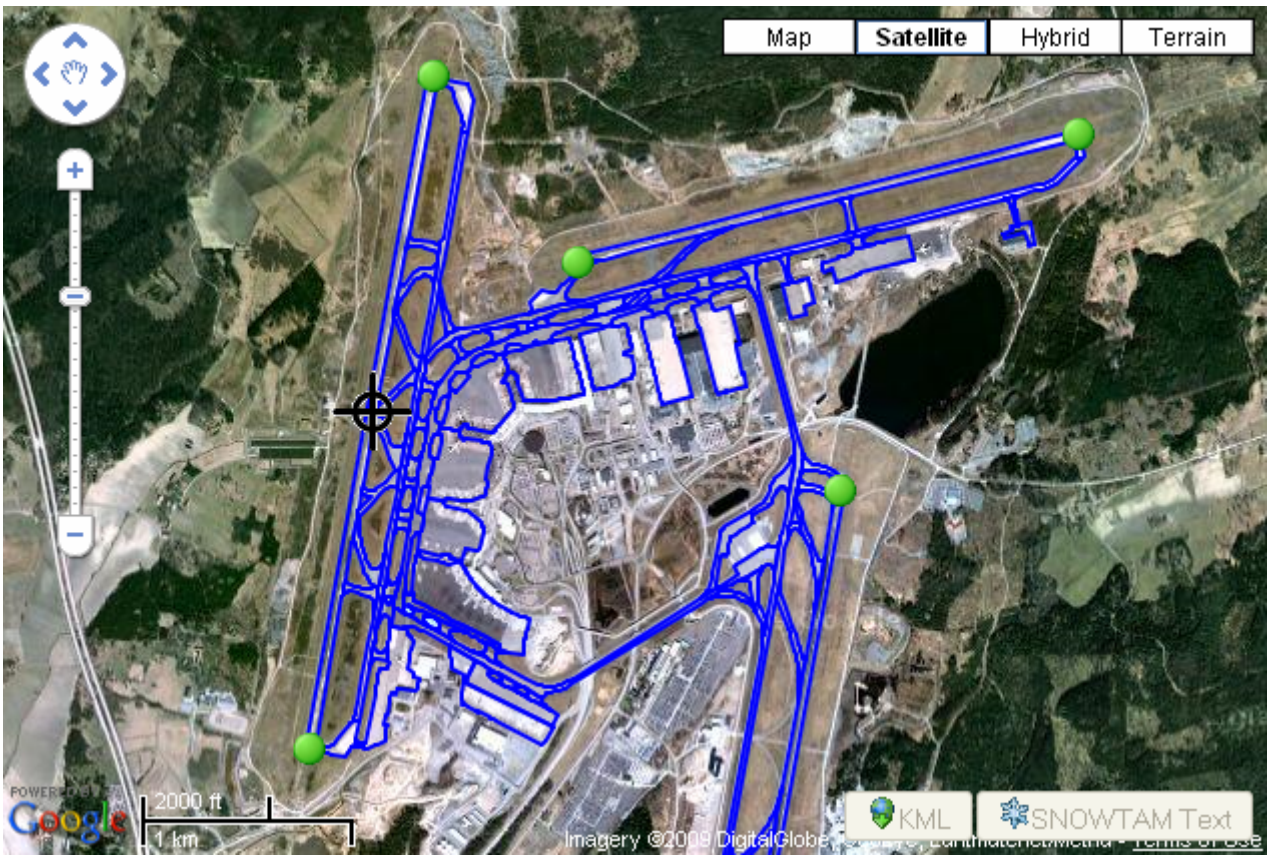


Figure 6 Satellite view of airport map

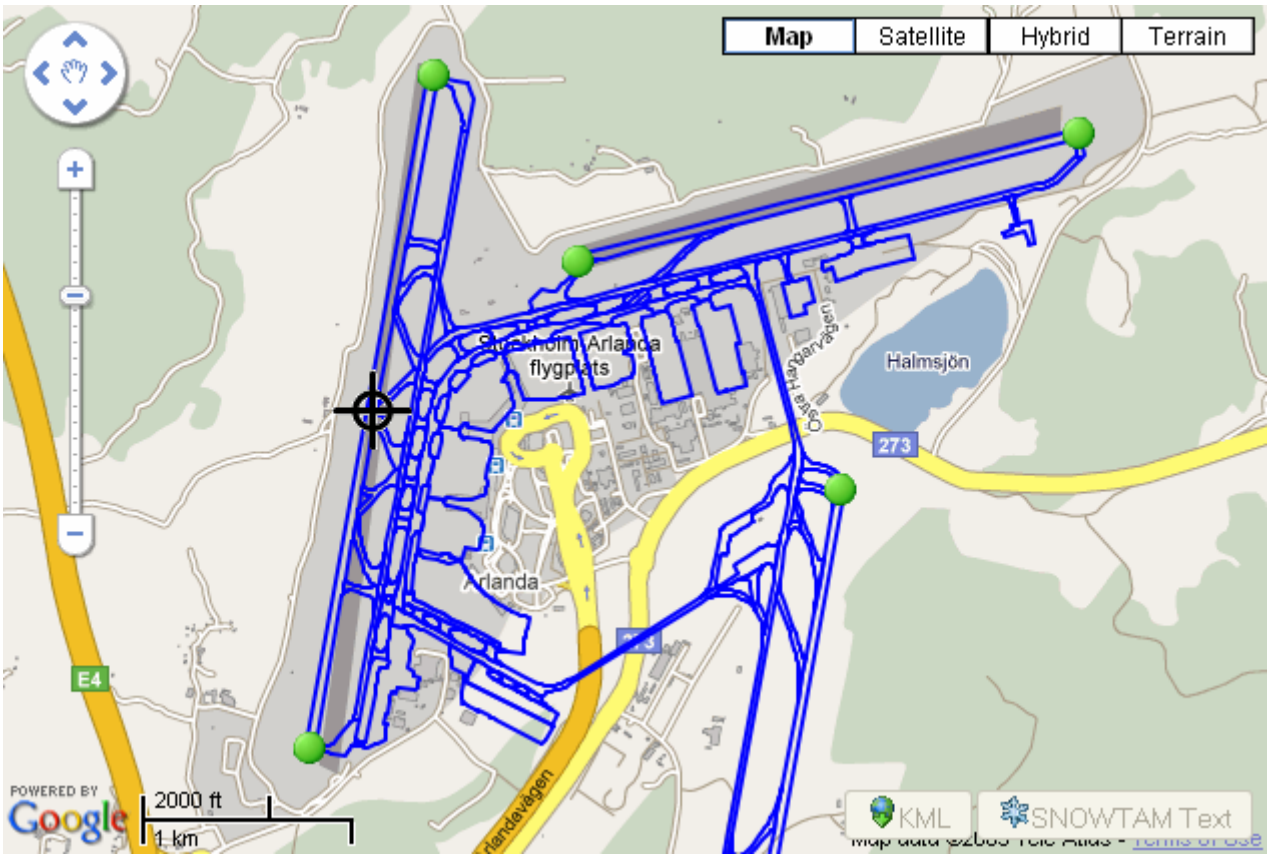


Figure 7 Map view of airport map

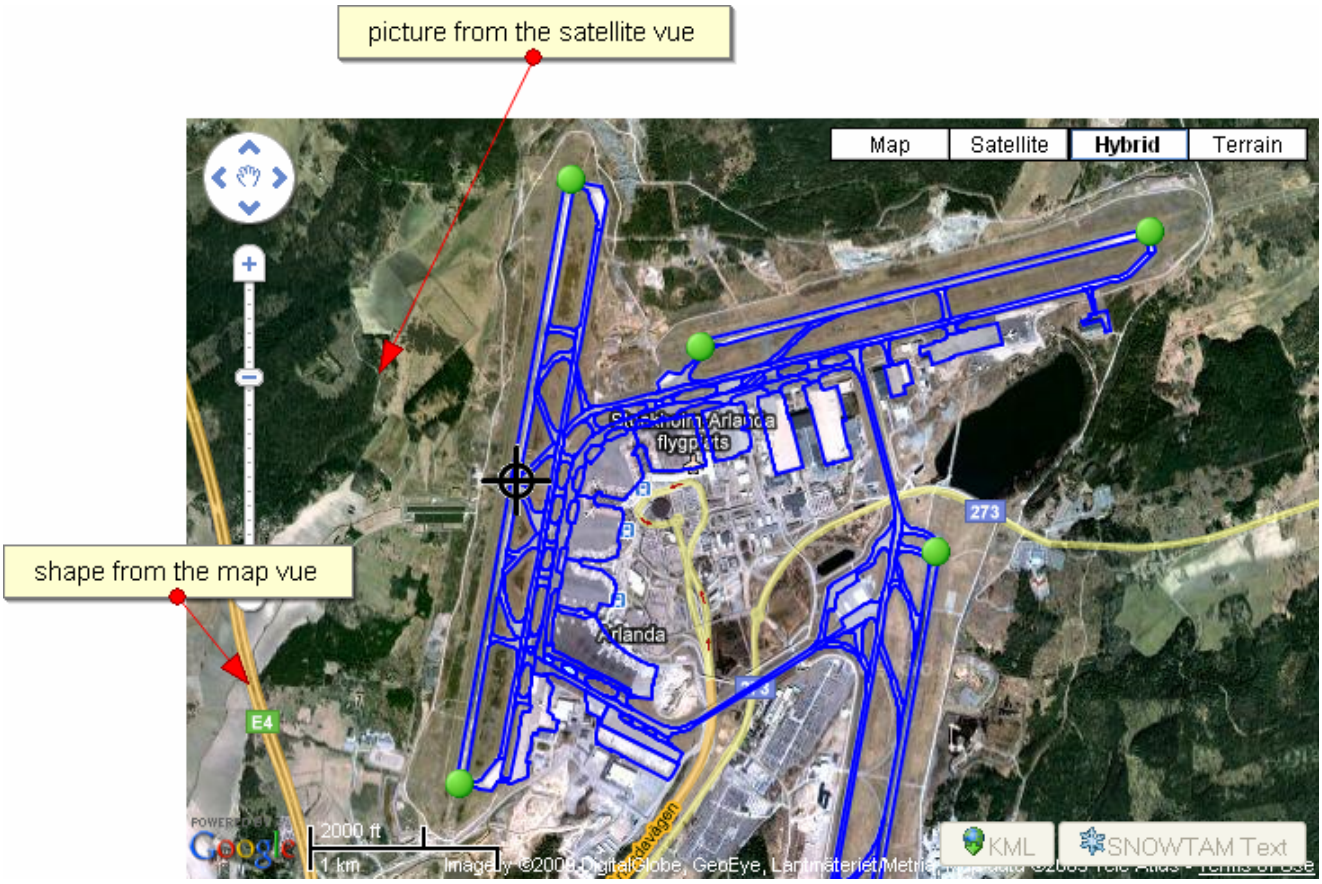


Figure 8 Hybrid view of airport map

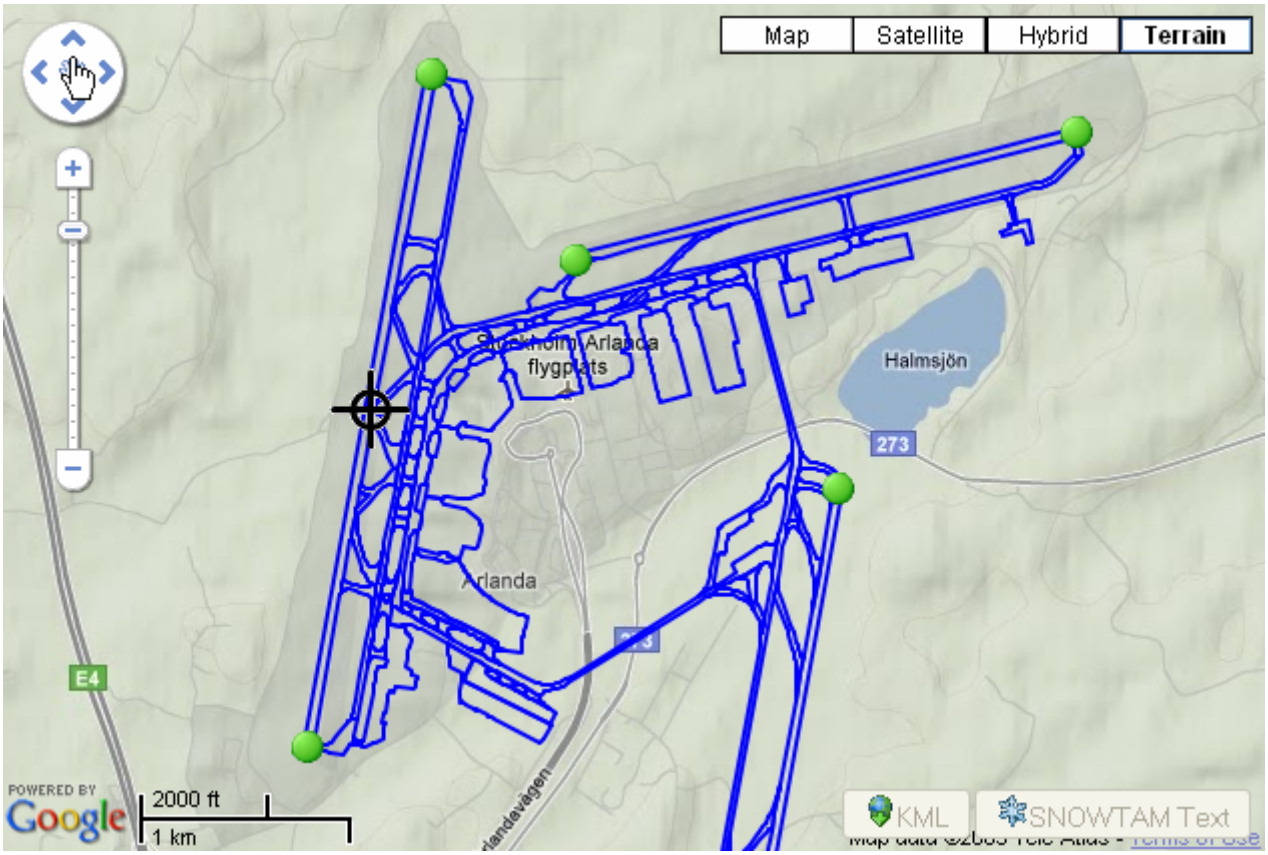


Figure 9 Terrain view of airport map

6.6.5 Viewing SNOWTAM Text

When a SNOWTAM message or contaminations are available for the selected airport, the "SNOWTAM Text" button in the bottom-right corner of the map will be enabled.

Click on this button to open a dialog showing

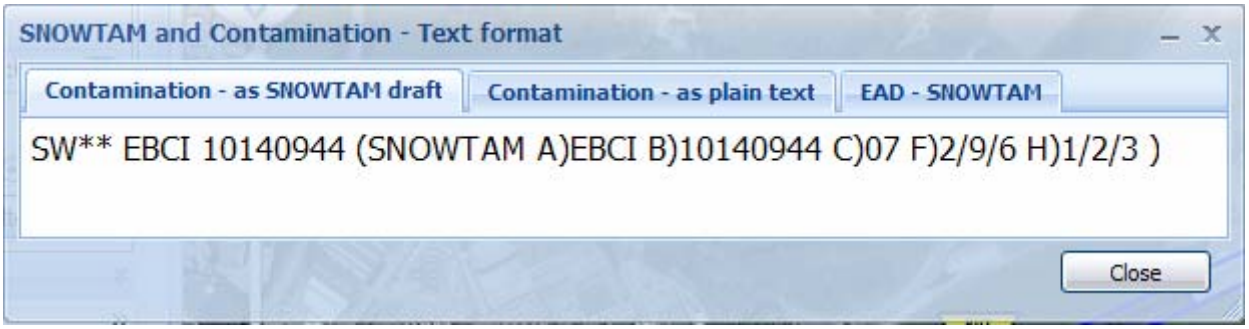
- Contaminations as SNOWTAM draft (as generated by the application)
- Contaminations as plain text
- The EAD SNOWTAM (as received from EAD) if applicable

Currently, airport wide contaminations can only be viewed in the "item T)" and "global remarks" fields. This is also the case for information contained in an original SNOWTAM message that couldn't be attached to a particular feature. This fact is emphasized in the screenshots below.

6.6.5.1 SNOWTAM Draft

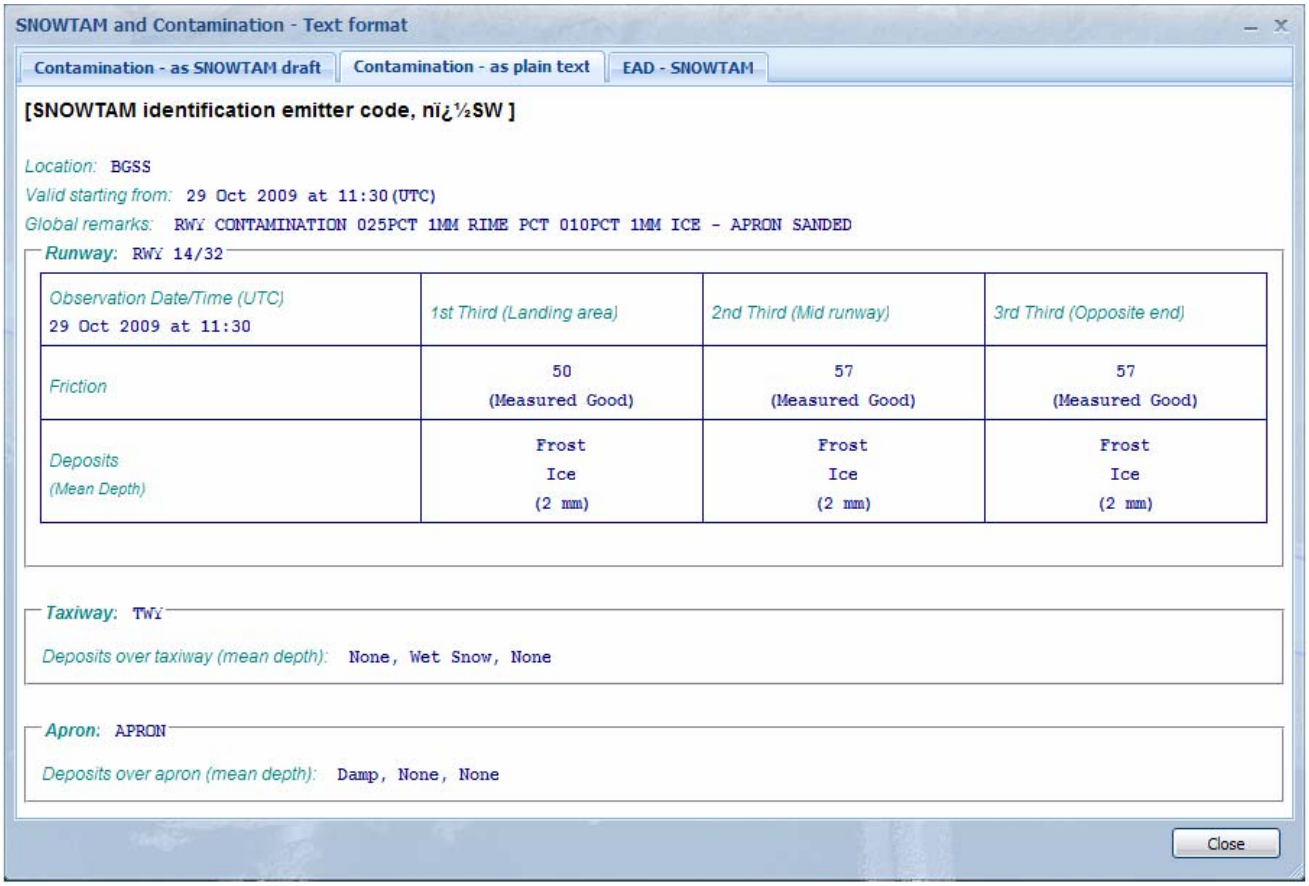
The SNOWTAM Draft is generated by the application based on the contaminations provided by Data Providers and on the parsing and translation of official ICAO SNOWTAM messages coming from EAD.

The SNOWTAM Draft is ICAO compliant.


SNOWTAM and Contamination - Text format
Contamination - as SNOWTAM draft
Contamination - as plain text
EAD - SNOWTAM
SW** EBCI 10140944 (SNOWTAM A)EBCI B)10140944 C)07 F)2/9/6 H)1/2/3)
Close

6.6.5.2 SNOWTAM plain text

The "Plain Text SNOWTAM" translates the contamination into a formatted human readable plain text message.



Note: the fact that the apron was sanded was provided in item T) of the original SNOWTAM:

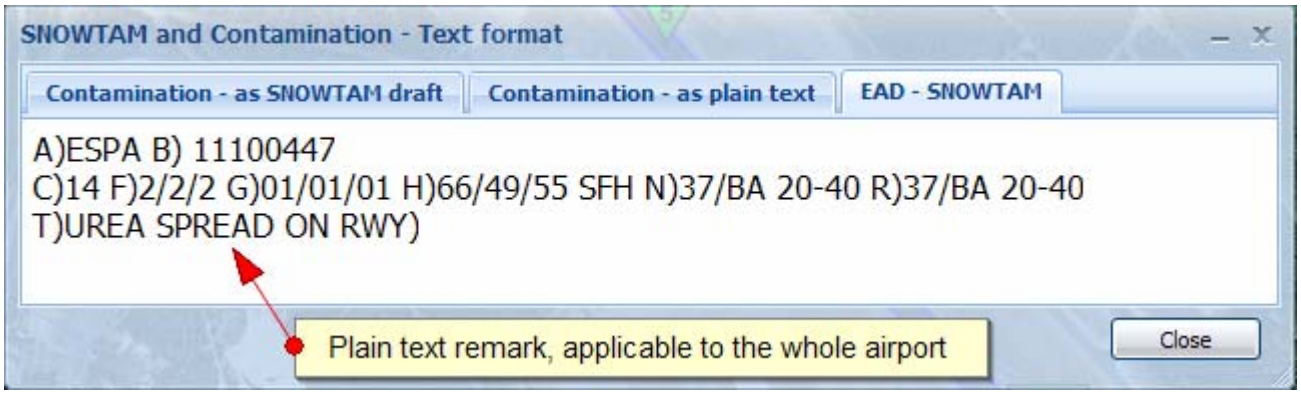
```
A)BGSS B)10291130
C)14 F)37/37/37 G)2/2/2 H)50/57/57 TAP
N)050PCT 2MM TYP37 - BA 65 TAP
R)100PCT 3MM TYP7 PCT 100PCT 1MM TYP3 - BA 40 TAP
T)RWY CONTAMINATION 025PCT 1MM RIME PCT 010PCT 1MM ICE - APRON SANDED)
```

The information could therefore not be processed by the application and has been left unchanged and attached to the global remarks.

6.6.5.3 EAD – SNOWTAM

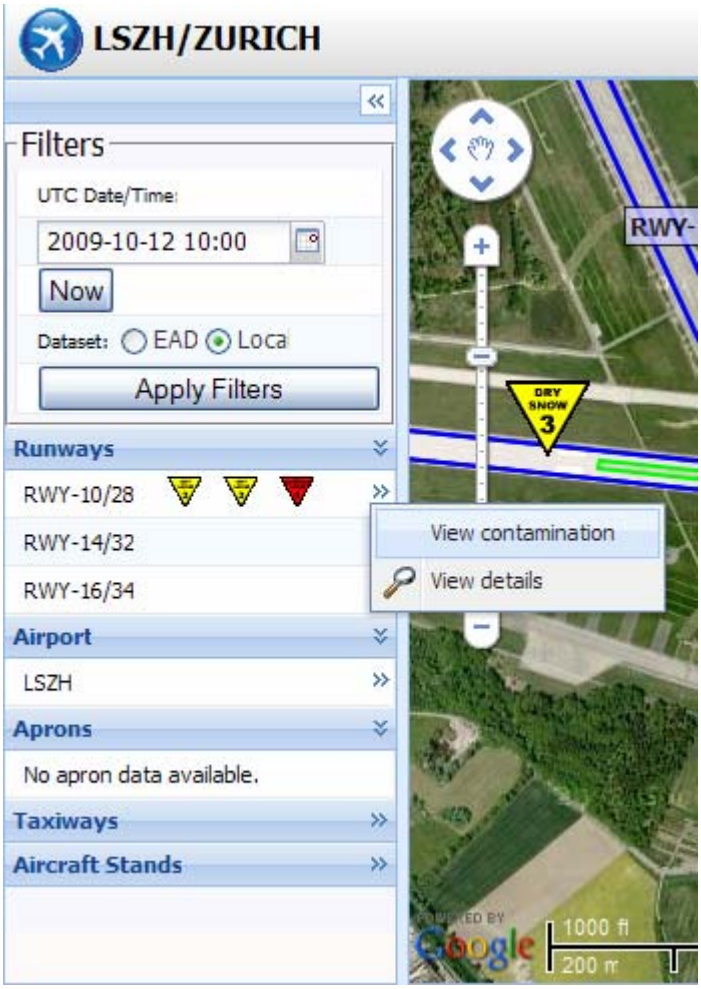
The "EAD – SNOWTAM" tab contains the original SNOWTAM message as it was received from EAD, without any interpretation or correction.

If the SNOWTAM was created within the application (so didn't come from EAD), the tab will only contain the 'NIL' value.


SNOWTAM and Contamination - Text format
Contamination - as SNOWTAM draft
Contamination - as plain text
EAD - SNOWTAM
A)ESPA B) 11100447
C)14 F)2/2/2 G)01/01/01 H)66/49/55 SFH N)37/BA 20-40 R)37/BA 20-40
T)UREA SPREAD ON RWY)
Plain text remark, applicable to the whole airport
Close

6.7 Viewing contaminations

When contaminations are available, they are accessible through the textual feature list on the right, by clicking on the 'View contamination' in the corresponding menu:



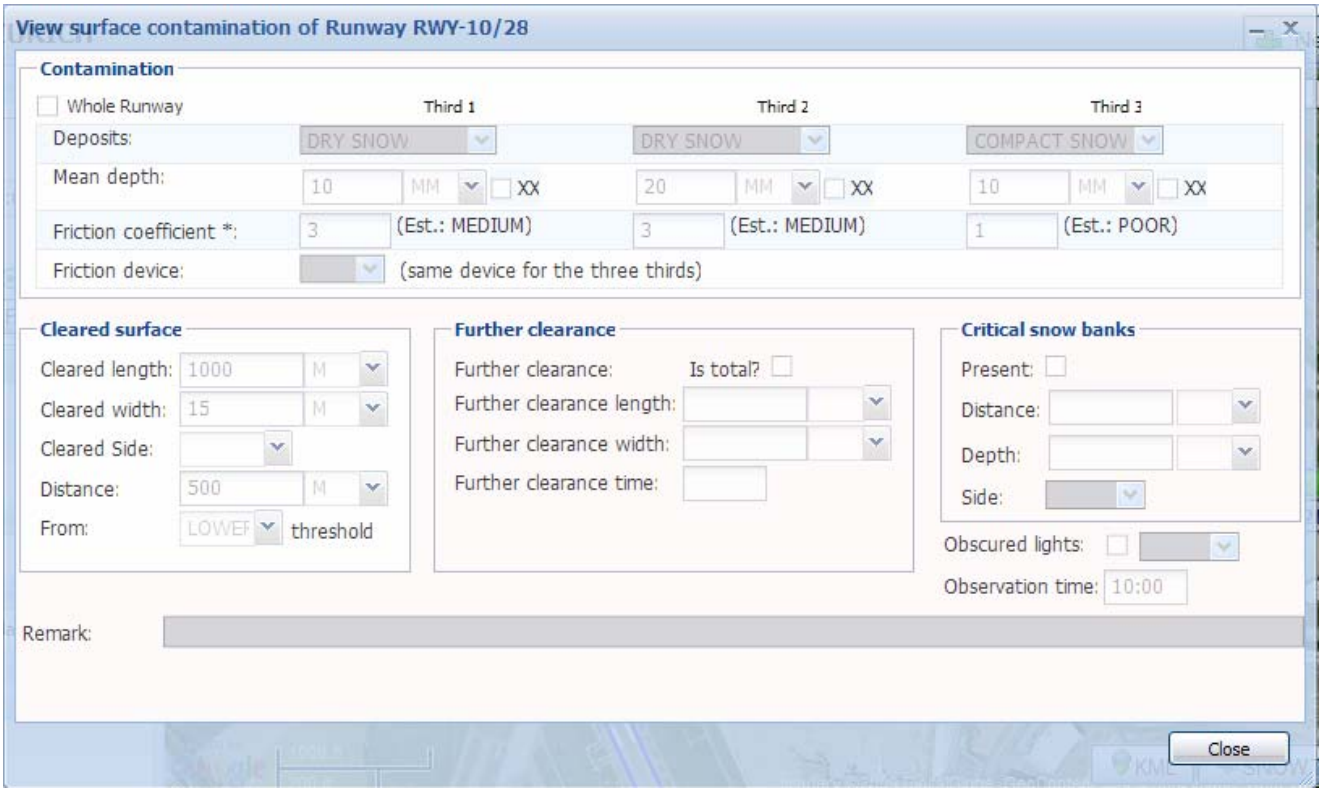
This will open a new dialog containing detailed information about the conditions on the selected feature. The contamination information is new read-only (it cannot be edited).

The dialogs differ depending on the specificities of each feature type and are described in the following chapters.

> **Remember:** Currently, global information about the whole airport is only available through the "SNOWTAM Text" feature. This includes the content item T (plain text remark).

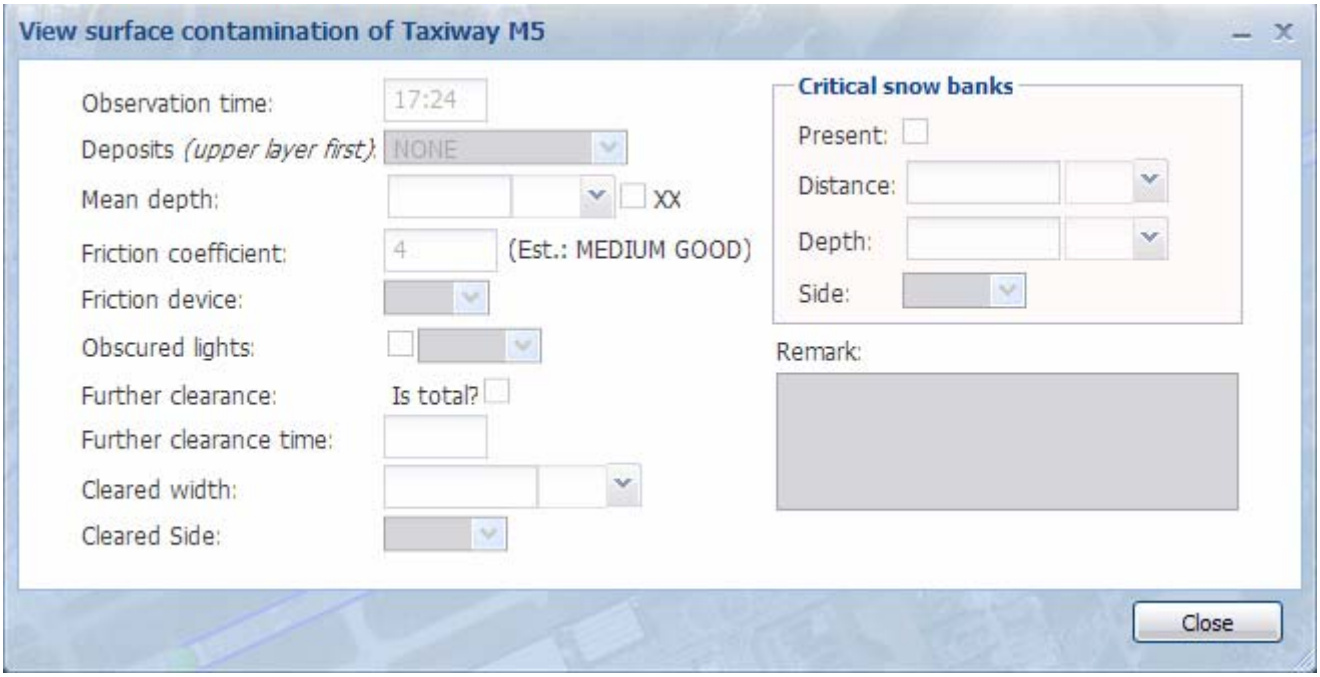
6.8 Viewing Runway Contaminations

Runway contaminations are always displayed by thirds.



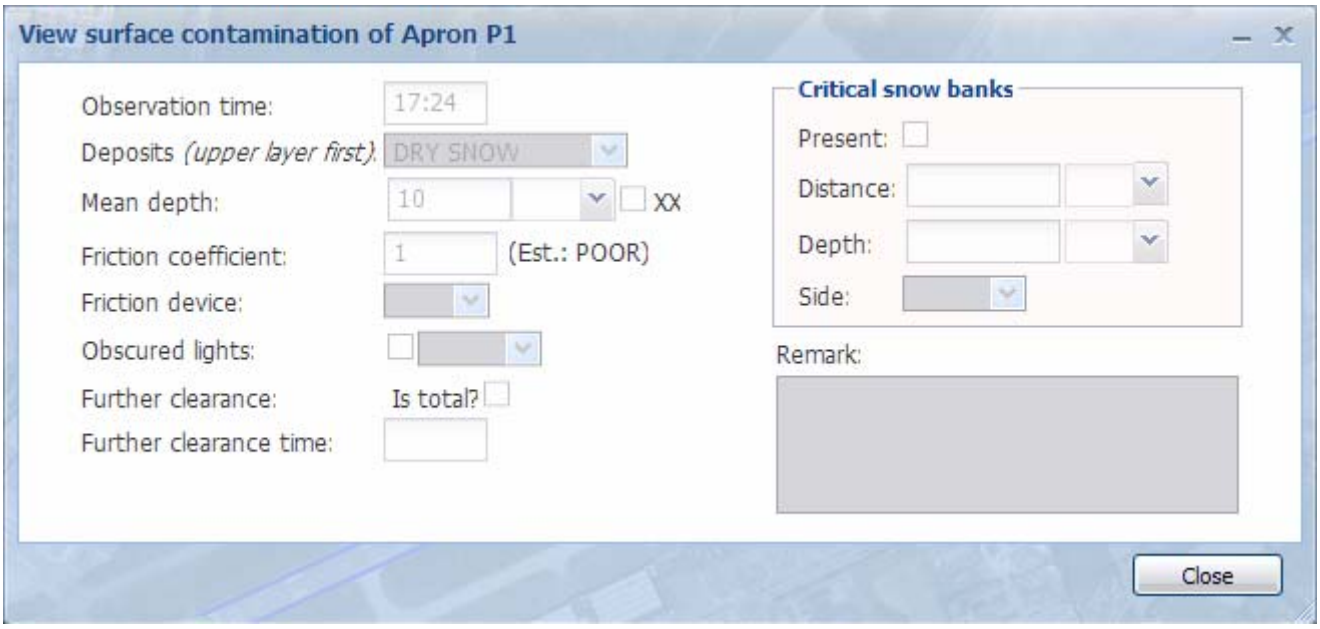
6.9 Viewing Taxiway Contaminations

Detailed information about taxiway contaminations is always accessible through the feature list on the right, by clicking on the 'View contamination' in the corresponding menu:



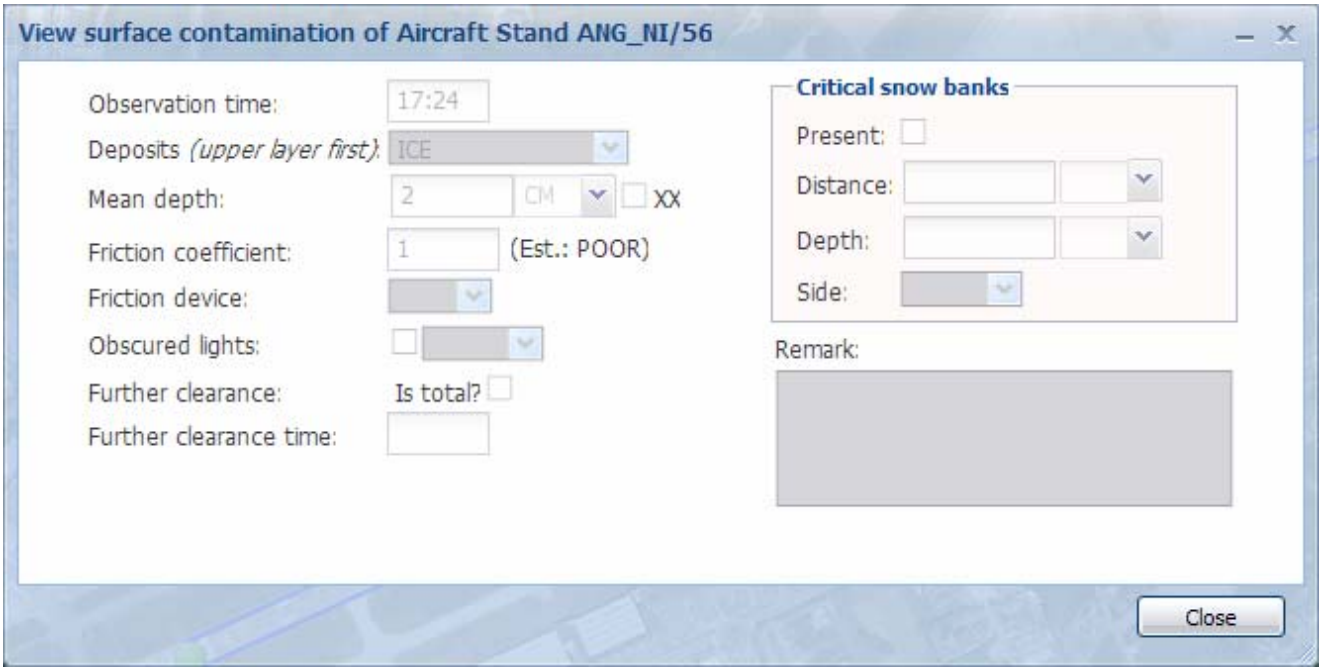
6.10 Viewing Apron Contaminations

Detailed information about apron contaminations is always accessible through the feature list on the right, by clicking on the 'View contamination' in the corresponding menu:



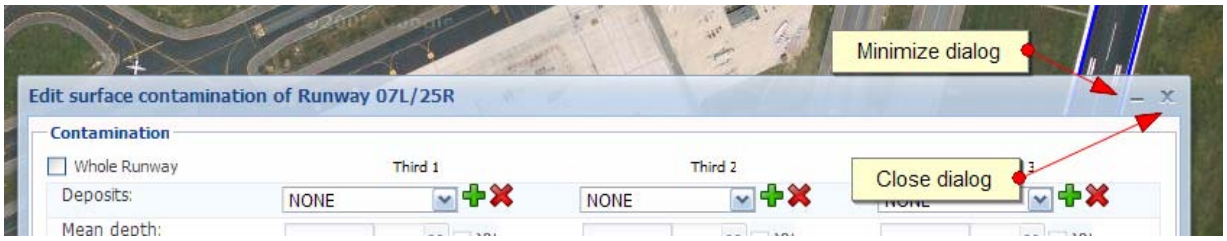
6.11 Viewing Aircraft Stand contaminations

Detailed information about aircraft stand contaminations is always accessible through the feature list on the right, by clicking on the 'View contamination' in the corresponding menu:



6.12 Using the contamination dialogs

Tip: The dialogs can be closed by clicking on the 'Close' button or on the "X" symbol in the upper right corner. The "_" symbol nearby can be used to show/hide the dialog temporarily (this can be used to see the map, while keeping the dialog at hand). A double-click on the dialog title has the same effect.



6.13 Visualization Options

The "Visualization Options" panel is located on the right of the Airport Map view. The panel allows for fine tuning which visual information is overlaid on the airport map. This is especially useful when the airport map is cluttered as shown below.

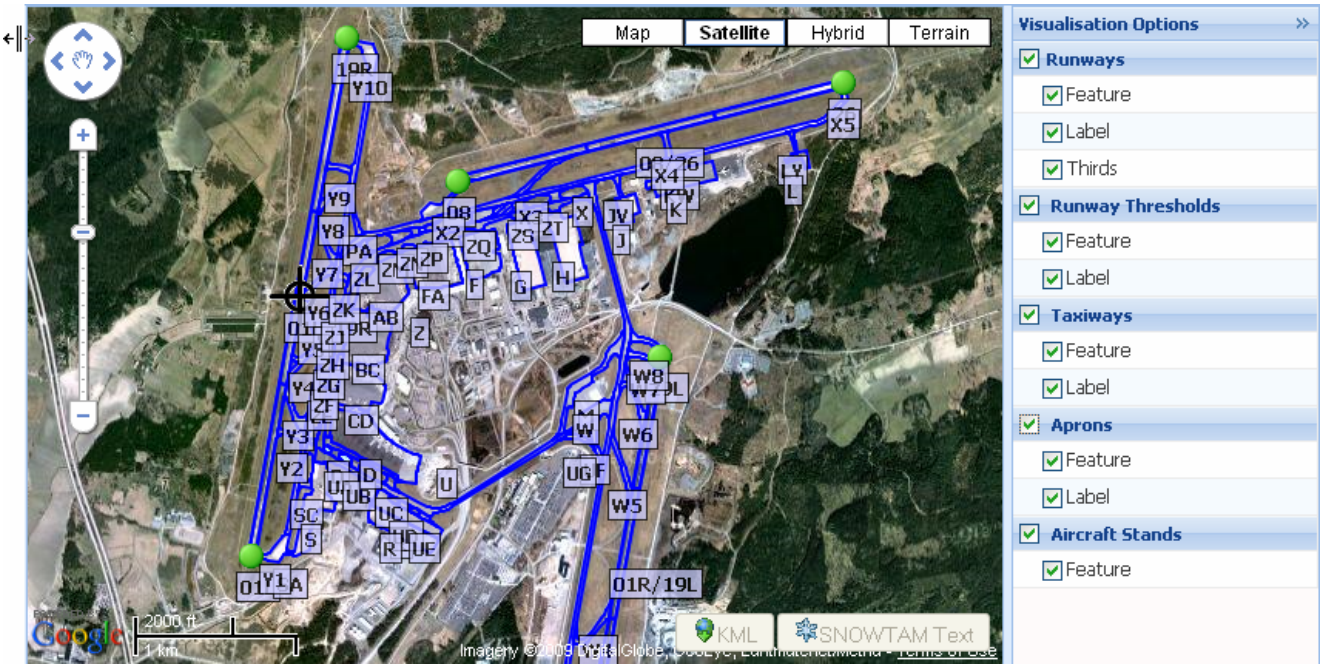
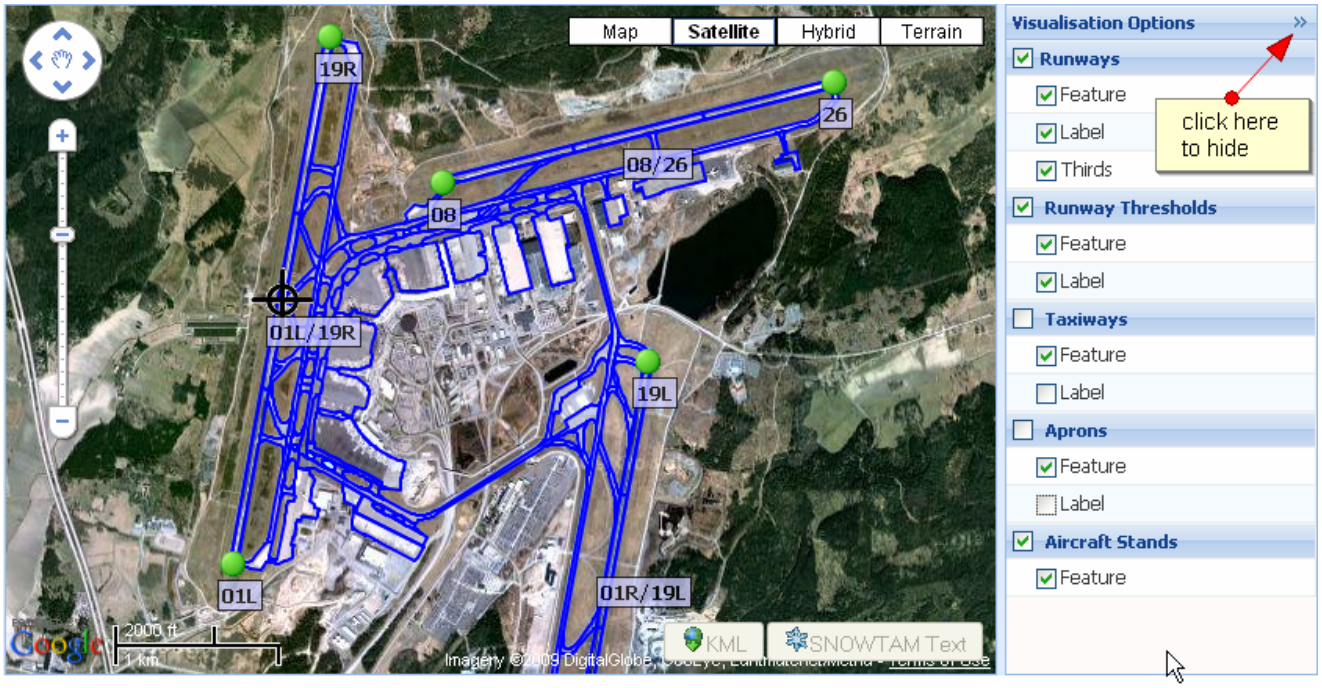


Figure 10 Visualization options panel

Each information category can be selected/deselected individually. In addition, all the categories of a feature can be selected/deselected at once using the feature check box.

Check a category (e.g. label in runway section) to show it, uncheck the category to hide it.
Check a feature (e.g. runway) to show all the corresponding categories, uncheck the feature to hide them.

Click on the icon in upper right corner of the panel to show/hide it. Hiding the panel allows for saving a significant area of the screen

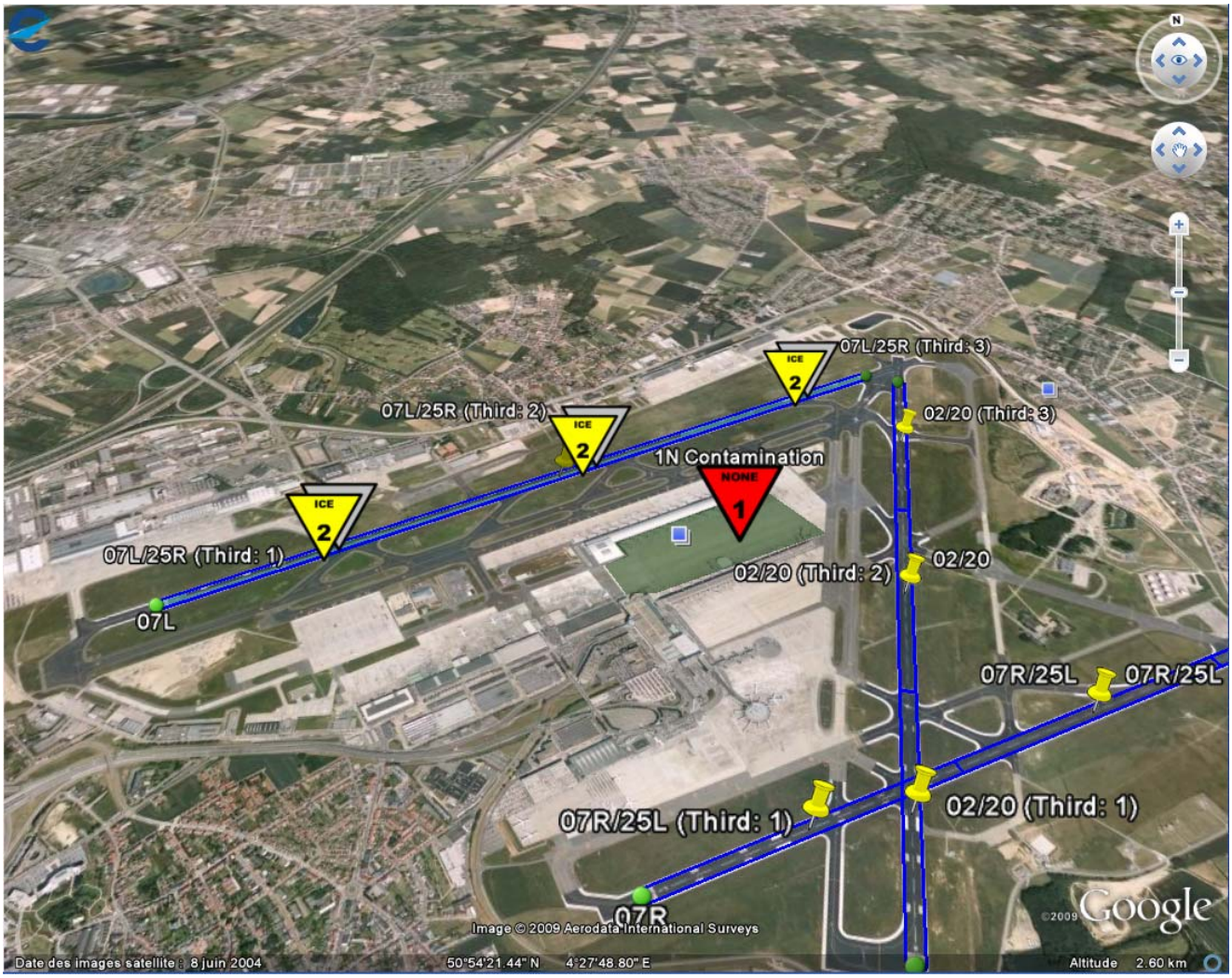


6.14 Viewing KML

When a SNOWTAM is available for the selected airport, the application allows downloading a KML export of the airport features and contaminations.

This KML file can be opened in Google Earth to display a three dimensional view of the airport.

Note: once opened in another application, the data contained in the file is totally detached. Editions made to the data in third party applications won't be imported in the Digital SNOWTAM application in any way.



7 Data Provider Interface

7.1 Introduction

As Data Provider, you have access to the Data Provider Interface, which provides read access to textual and graphical representations of features and contaminations for all airports, world-wide. You will also be able to create and edit contaminations all airports for which your organization has ownership[2].

After login, no action is required on your side. The application will automatically direct you to the appropriate section.

Data Providers also have access to the Data User Interface. In fact, to allow maximum flexibility, the Data User and Date Provider Interfaces have been built together into a single application, with a single point of access. Most screens are common to both Interfaces. Depending on your access rights, you will have access to more or less functionalities.

It is certainly a good idea to read the chapter about the Data User Interface even if you have Data Provider access (see "6 - Data User Interface" page 22)!

7.2 Typical usage flow

The typical usage flow of the Data Provider Interface is as follows:

<table>
<tr><td>1.</td><td colspan="2">Login

Enter your login name and password</td></tr>
<tr><td>2.</td><td>Find airports

Find Airport Page
Quick Search Feature</td><td>Airport Overview

An overview of the current SNOWTAM situation, World-wide!</td></tr>
<tr><td>3.</td><td colspan="2">New Observation

Create new surface contaminations for all affected airport/heliport features.

Your observation remains only visible by you until it is published.</td></tr>
</table>

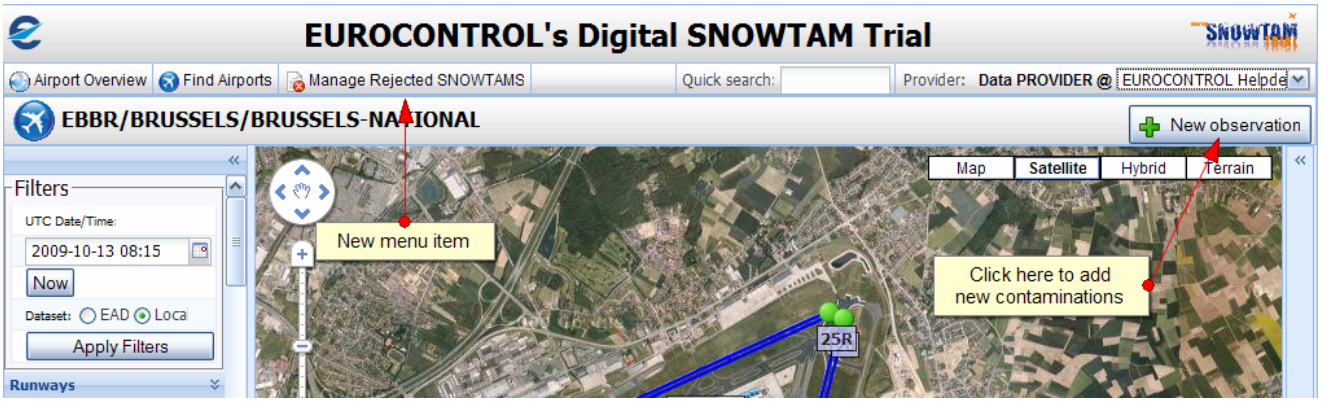
[2] Ownership is a right to an organization on an airport which allows creating and editing contaminations

4.	**Publish** The application will activate the contaminations and generate the corresponding ICAO SNOWTAM Draft. Your observation becomes publicly available.
5.	**View airport contaminations** View the airport, its associated features and contaminations on a map

7.3 Main Screen layout

The screen layout is almost identical to the Data User Interface; please refer to the corresponding chapters.

However, as a Data Provider, you also have access to a screen allowing the management of rejected SNOWTAM Messages (non standard messages received from EAD that the application was unable to translate automatically).



7.4 Airport Map

The Airport Map is the main screen of the application. It offers both textual and graphical viewing and editing of airport features and contaminations:

	View	Create/Edit
Features	Yes	-
Contaminations	Yes	Yes

Its layout is globally the same as in the Data User Interface, except for some extra capabilities:

- create a New Observation
- create and edit surface contaminations
- close/open airports and runways
- manage rejected SNOWTAMS

7.5 New Observation Mode

By default, the Airport Map is displayed in view mode. To encode new contaminations (and as such create a SNOWTAM Draft), click on the "New Observation" button on the upper-right part of the map.

> **Note: you must be a member of an organisation which has ownership over the current airport to be able to add new observations.**

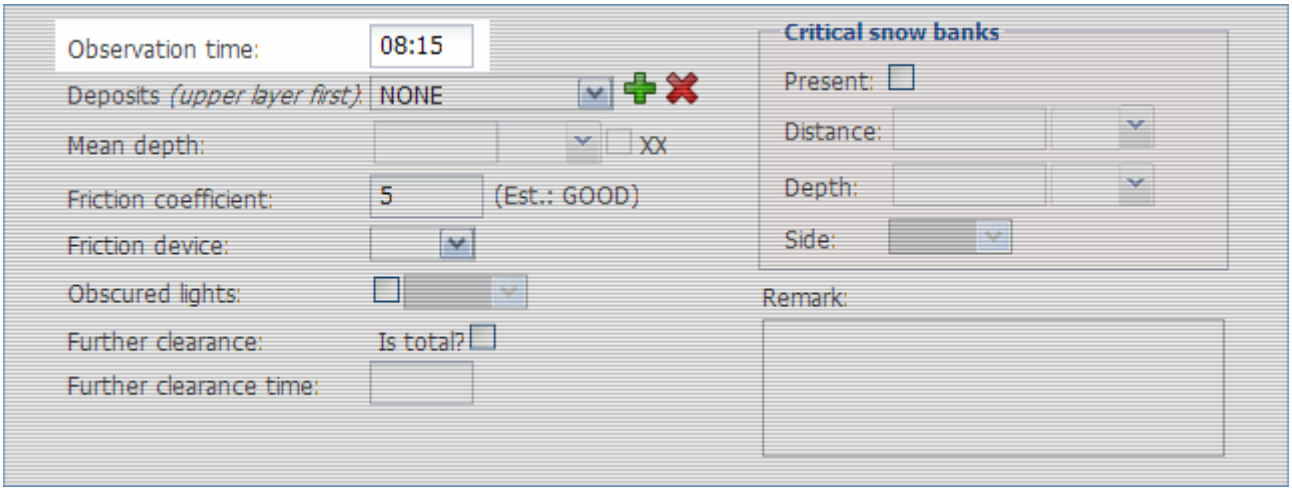
The map will reload to enable creating new contaminations on airport features. To highlight the fact that it is in Observation Mode, the map header will change color and become orange. Also, the 'New Observation" button will be replaced by "Publish" and "Cancel" buttons.

7.6 Common fields for editing contaminations

While contaminations dialogs differ between feature types, they have a few fields in common. This chapter explains those common fields and how to work with them.

7.6.1 Observation time

This field allows entering a specific UTC time for each observation (item B). The query time used in the filters section is used by default.

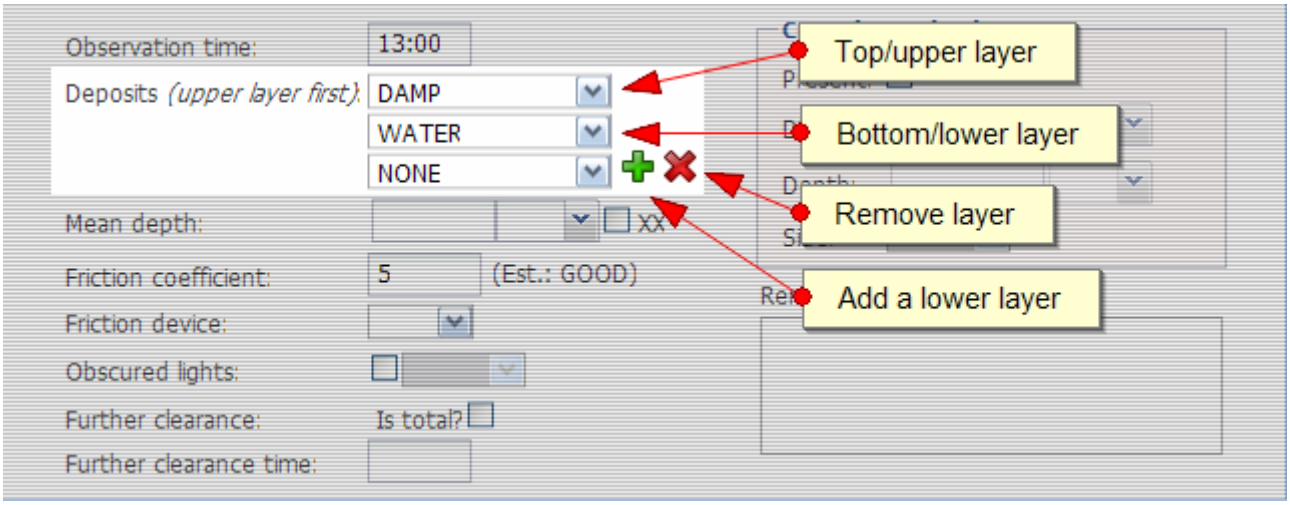


The time must be in HH:MM format (24h); otherwise a validation error will be raised:

Note that changing the value of this field will have no effect on the ICAO SNOWTAM Draft, where only the global observation time (defined in filter) will be used.

7.6.2 Deposits

This field allows editing one or more contaminant layers (item F).

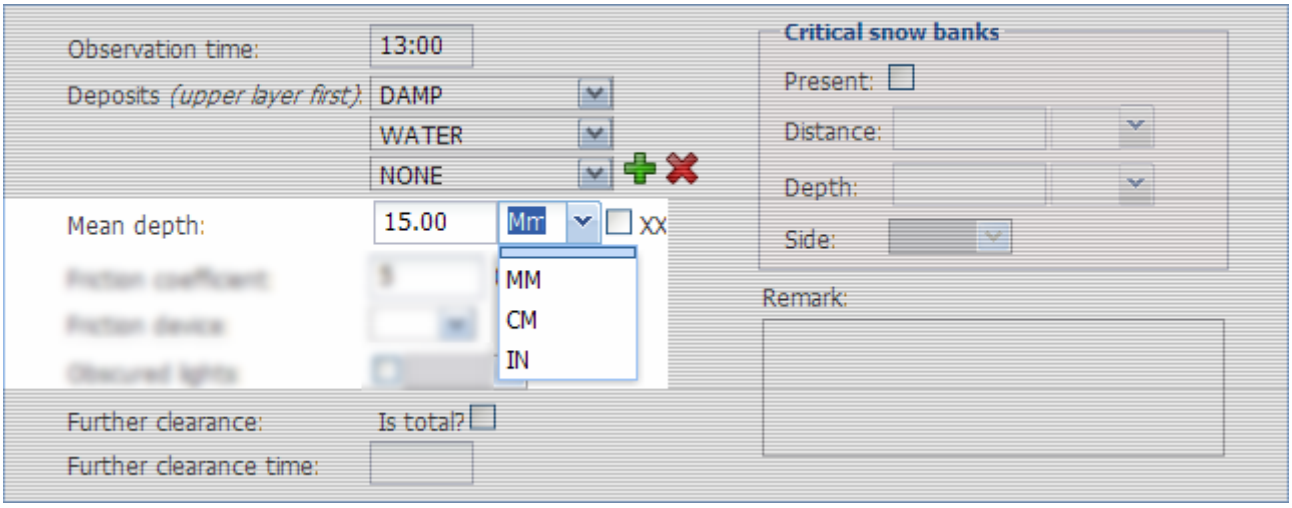


To add a layer, click on the icon. To remove a specific layer, click on the icon.

In concordance with ICAO Annex 15, deposits must be specified from top to bottom (upper layer first). You must always specify a contaminant for an upper layer before adding a new layer. In other words, you cannot add a new layer if the current bottom layer is set to "none"

7.6.3 Mean depth

Mean depth allows specifying the mean depth of all contaminants (item G). It applies to all the layers at once (not layer by layer).

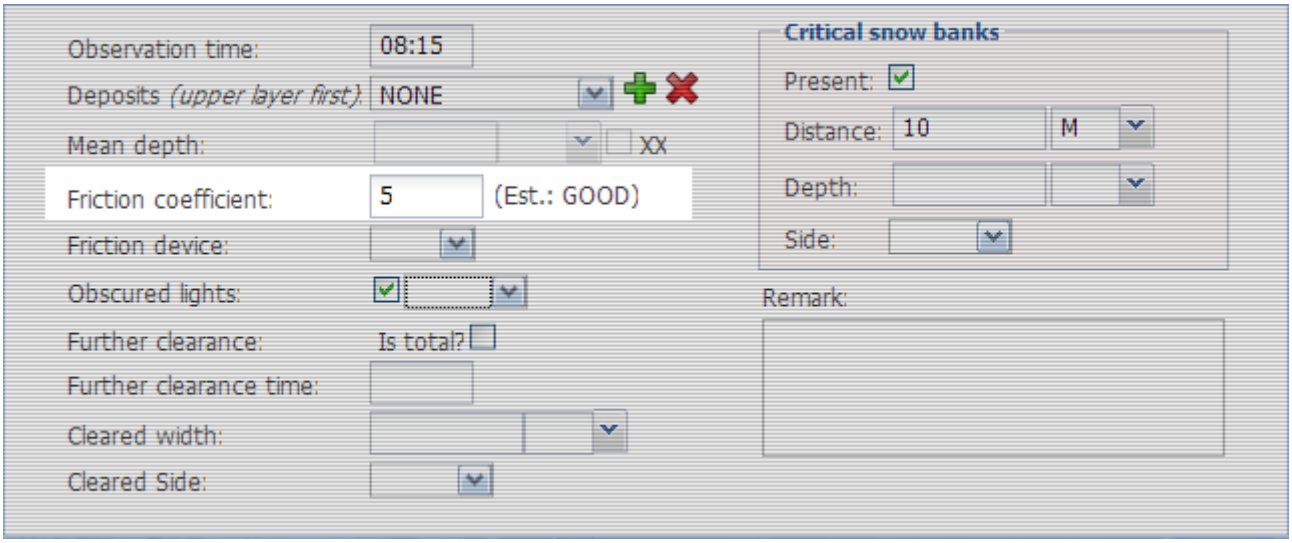


A unit of measurement is mandatory if a measure is provided. The selection may be made with the mouse, keyboard up and down arrow keys or by typing the corresponding value directly (in which case auto-completion is enabled).

Check the "xx" check box if the depth exists but can't be measured.

7.6.4 Friction coefficient

The friction coefficient supports all ICAO SNOWTAM formats (item H).



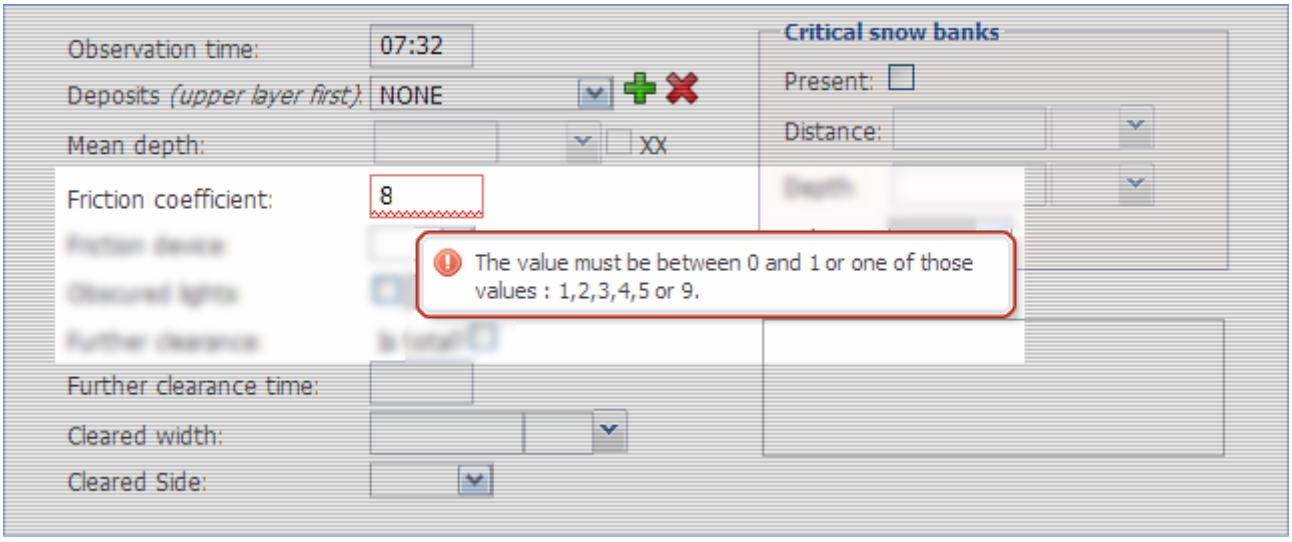
Supported formats are:

- 0.00 → 0.99 (measured)

- 1 → 5 (single digit = estimated)
- 9: unreliable

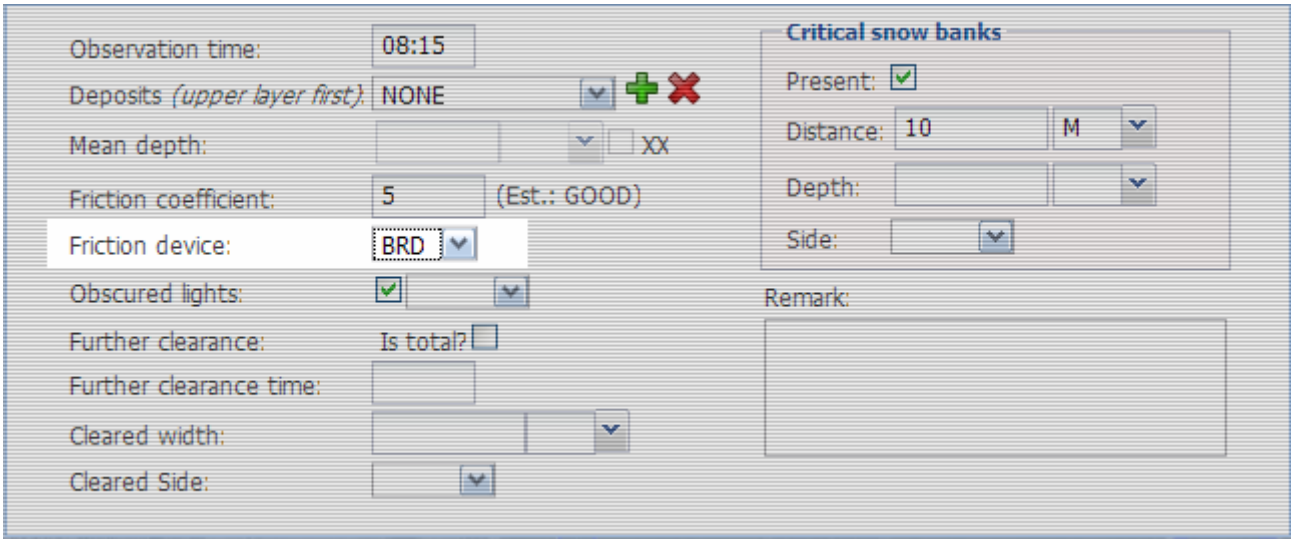
The application will analyze the value and provide information about it next to the field ("measured", "est. good"...).

Invalid values will be outlined in red, mouse the mouse over the field to display a tooltip explaining the error.



7.6.5 Friction device

Select a friction measurement device (item H) if the coefficient was measured.

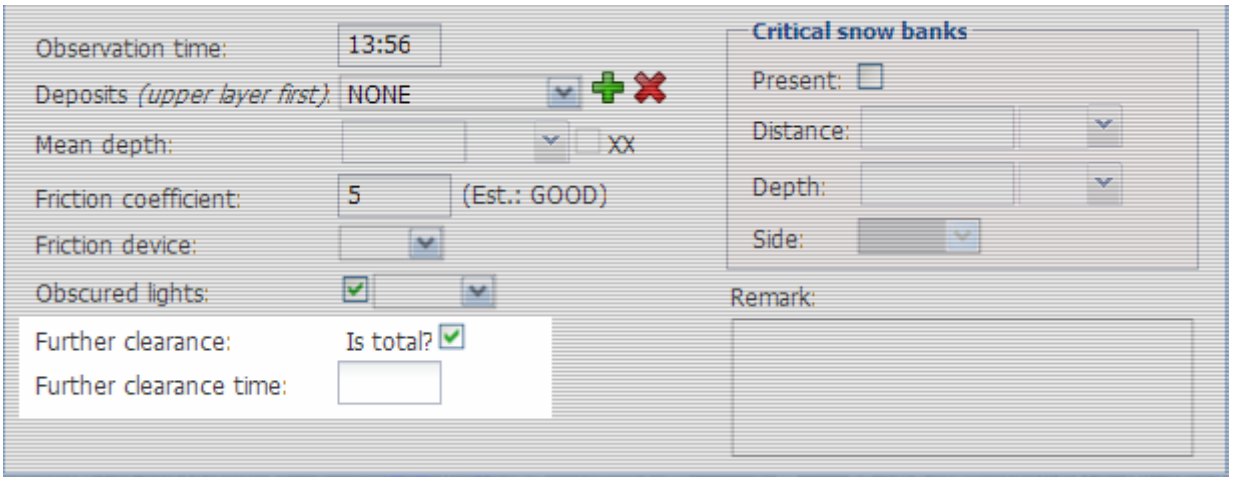


The selection may be made with the mouse or keyboard up and down arrow keys. Limited auto-completion is enabled: type the first letter of an abbreviation to automatically select the first matching item in the list.

7.6.6 Further clearance

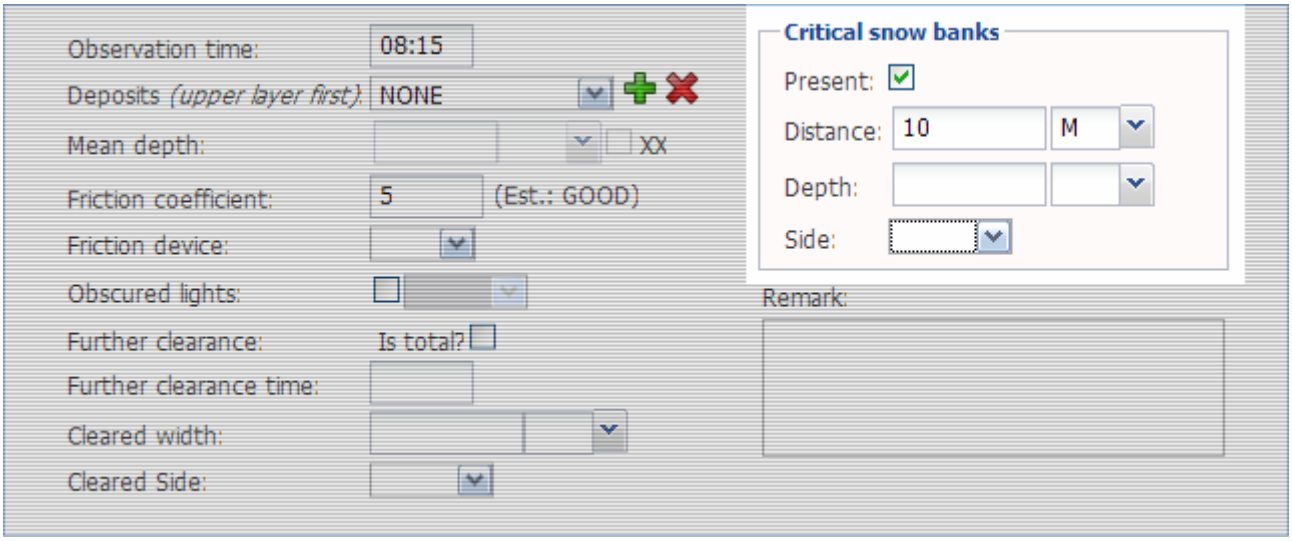
The application allows you to specify if and when further clearance of the feature is planned (items L and M for runways).

Total clearance (item L) and further clearance time (item M) are supported for all feature types, unlike standard ICAO SNOWTAM messages, where it is only supported for runways.



7.6.7 Critical snow banks

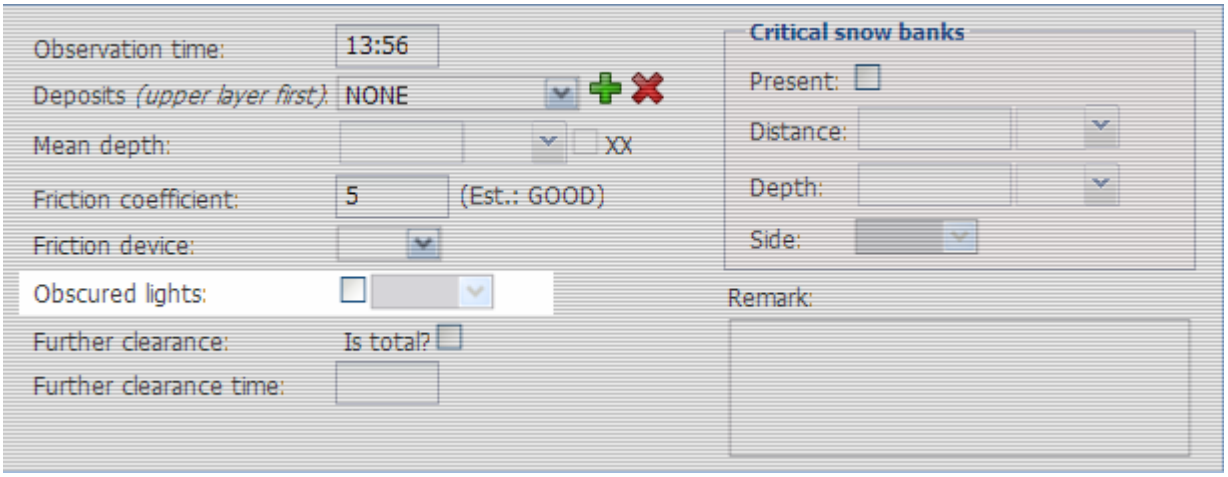
Check the "present" check box if snow banks affect the corresponding feature (item J) to enable the distance, depth and side fields (they are disabled by default when creating a new contamination).



Units of measurement are mandatory if a measure is provided. The selection may be made with the mouse, keyboard up and down arrow keys or by typing the corresponding value directly (in which case auto-completion is enabled).

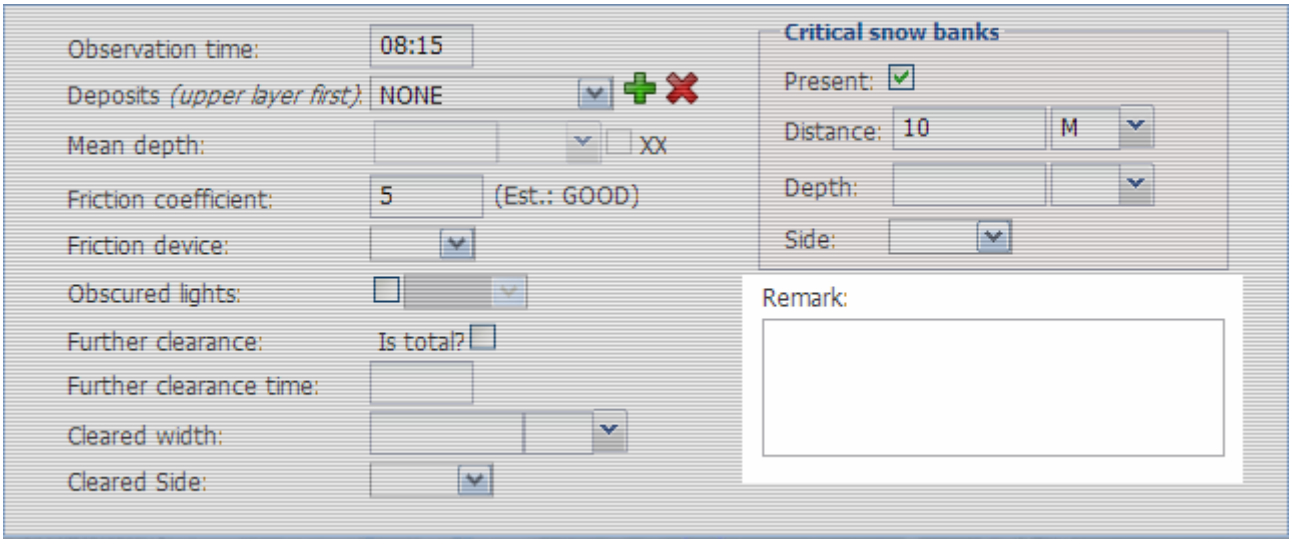
7.6.8 Obscured lights

If lights are obscured, check the checkbox. Next, select "Left", "Right" or "BOTH" in the select box if applicable ("BOTH" is equivalent to "LR" from the SNOWTAM form).



7.6.9 Remark

Remark is a free text field which supports any text entry. Its content will be appended in to the item T of the ICAO SNOWTAM Draft.



It may be used to provide additional information about a feature, such as "de-icing in progress", "runway sanded"...

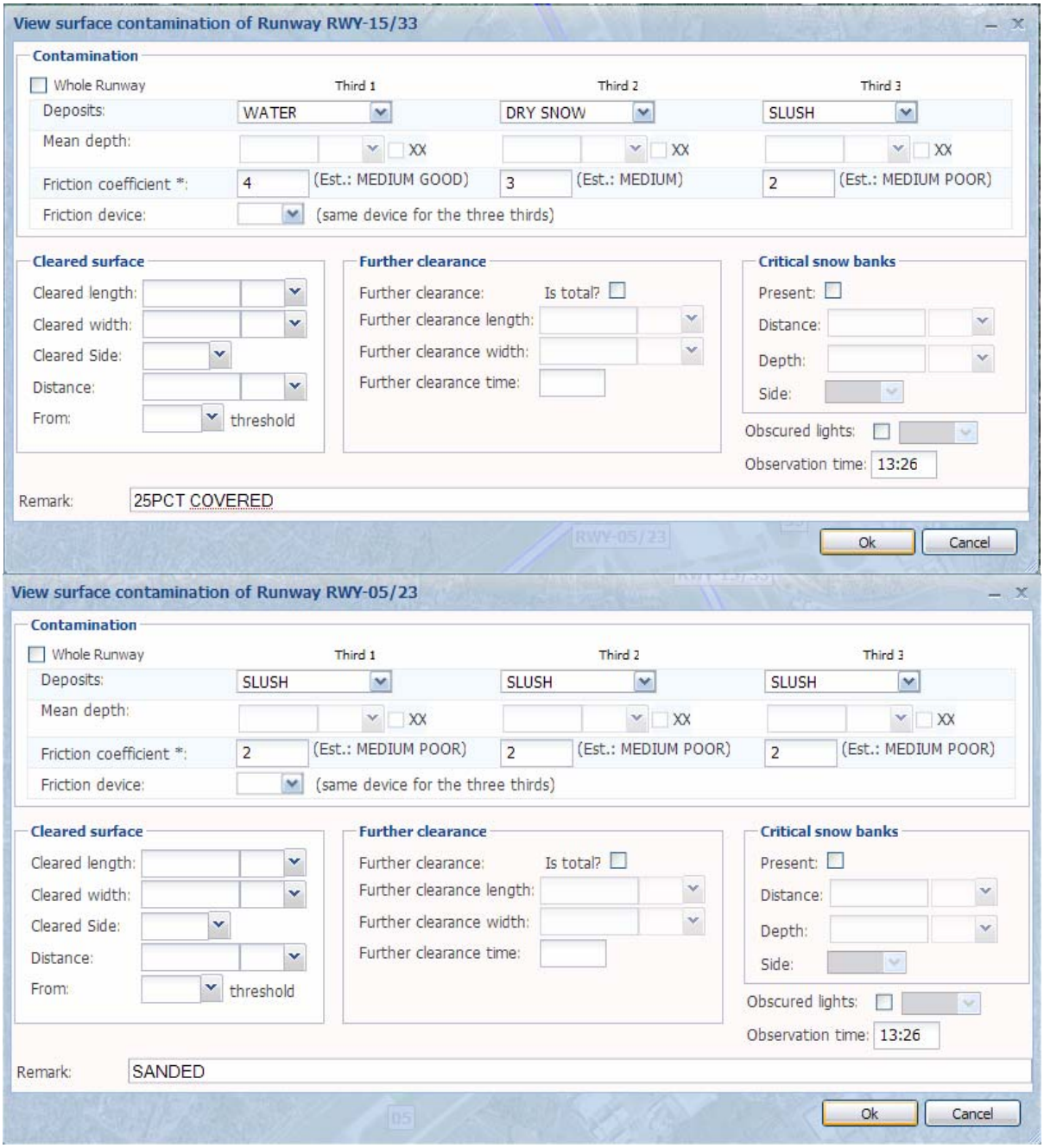
Its position and size may vary depending on the dialog.

In a usual ICAO SNOWTAM message, this information would have been provided in the global item T). However, this application allows you to specify those remarks for the corresponding feature. This will ensure better conciseness and flexibility.

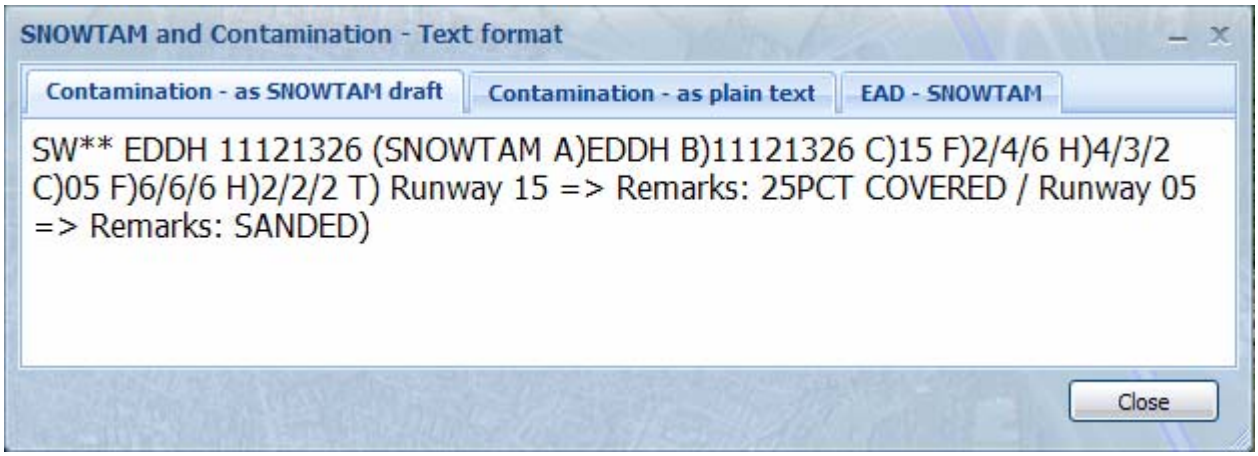
Note that as this now information is provided "in context" (that is, for the corresponding feature), there is no need to specify the designator and feature type anymore. See the example below.

When the ICAO text version of those contaminations will be generated, all those remarks will be aggregated in the "item T)" field.

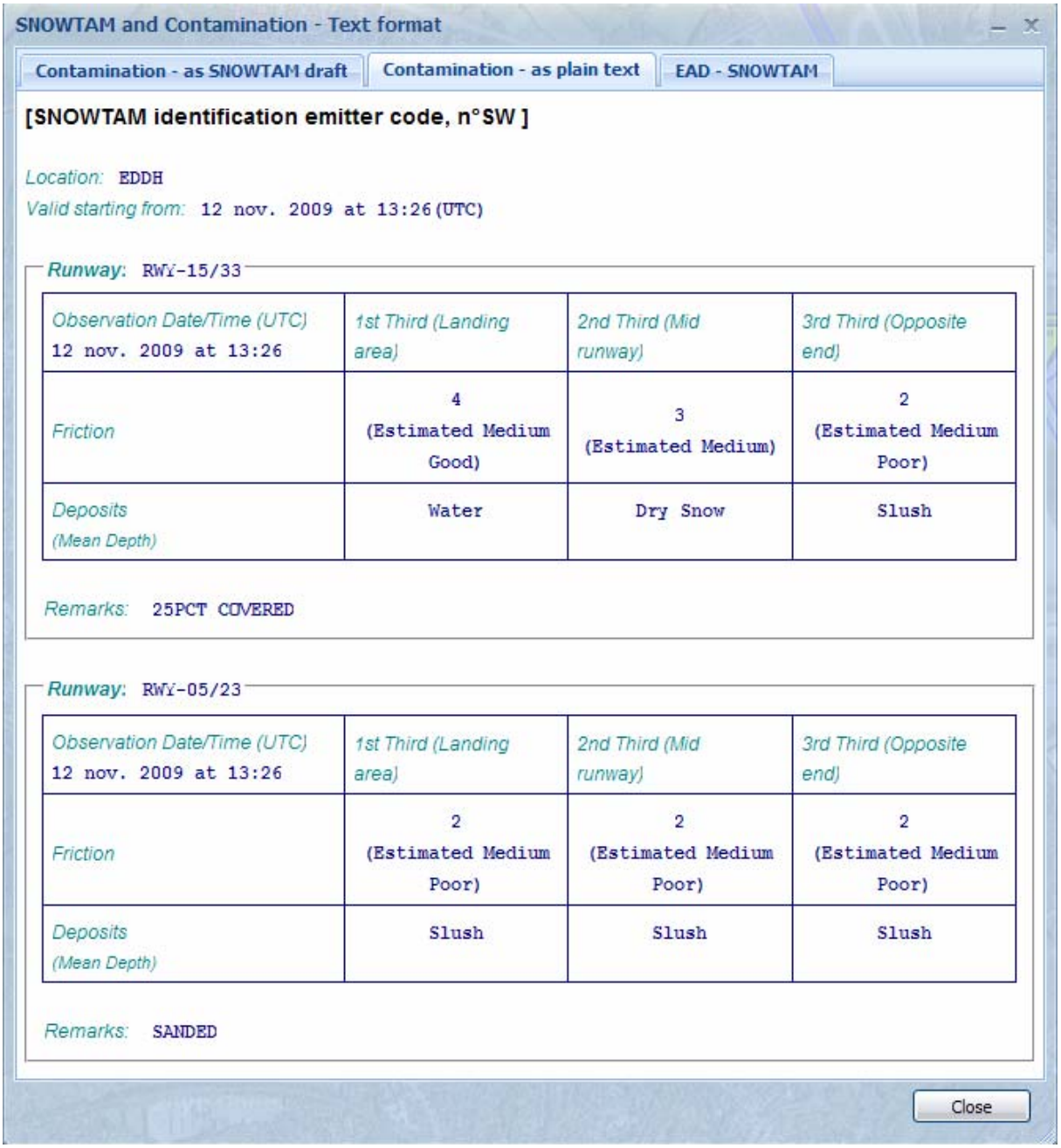
For example, we have typed remarks for both runways of airport EDDH:



This will result in the following text formats:


SNOWTAM and Contamination - Text format
Contamination - as SNOWTAM draft
Contamination - as plain text
EAD - SNOWTAM
SW** EDDH 11121326 (SNOWTAM A)EDDH B)11121326 C)15 F)2/4/6 H)4/3/2 C)05 F)6/6/6 H)2/2/2 T) Runway 15 => Remarks: 25PCT COVERED / Runway 05 => Remarks: SANDED)
Close

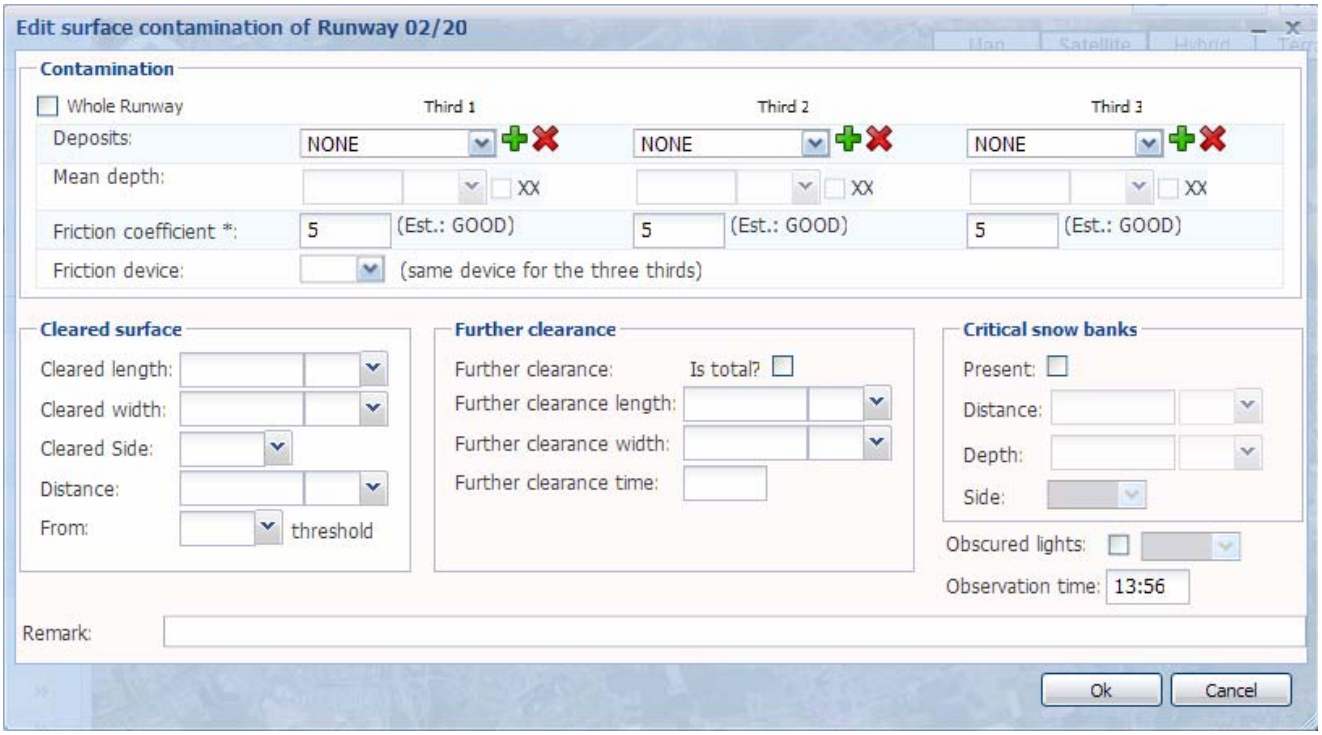
Both remarks have been aggregated into item T, prefixed with the runway designator.



In the plain text format, the remarks are printed under their corresponding features.

7.7 Editing/Creating Runway contaminations

This dialog allows creating and editing contaminations for runways. It contains all the common fields described in chapter "**Error! Reference source not found. Error! Reference source not found.**" on page **Error! Bookmark not defined.**.

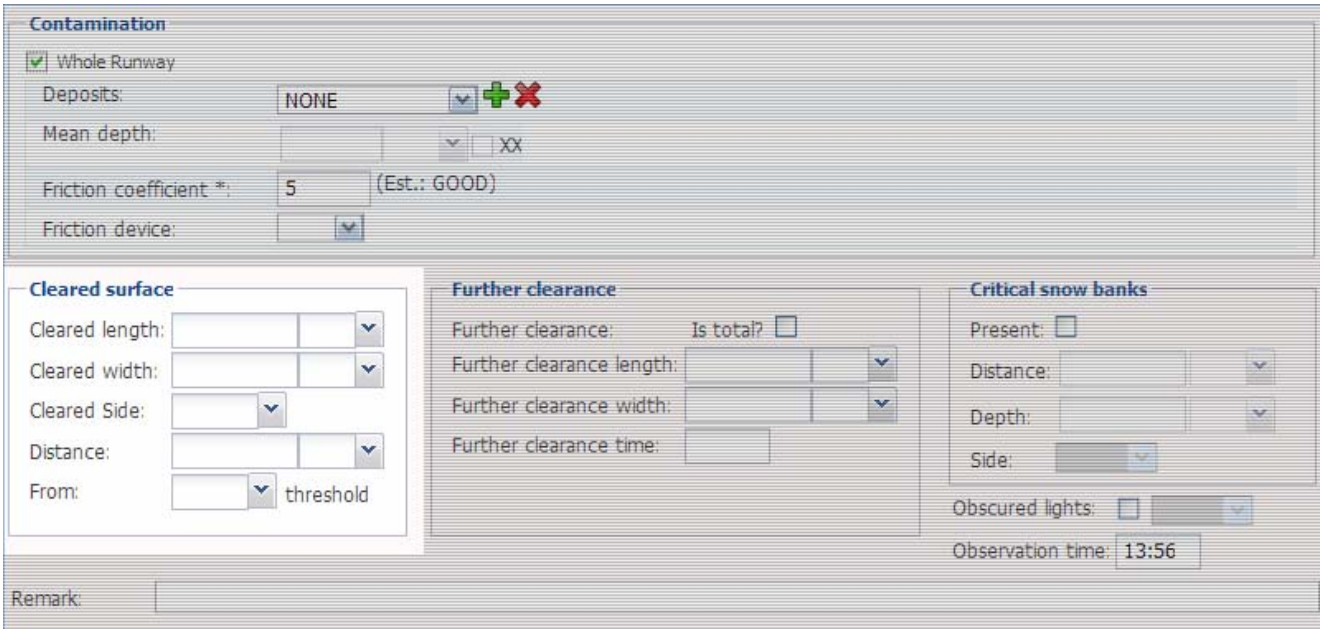


It allows encoding of contaminations by thirds (like in the ICAO form) or for the whole runway. It is only an encoding facility, as the contaminations will be stored by third too.

If you prefer/need to provide contaminations for the whole runway at once, check the "Whole runway" check box in the "Contamination" field set:

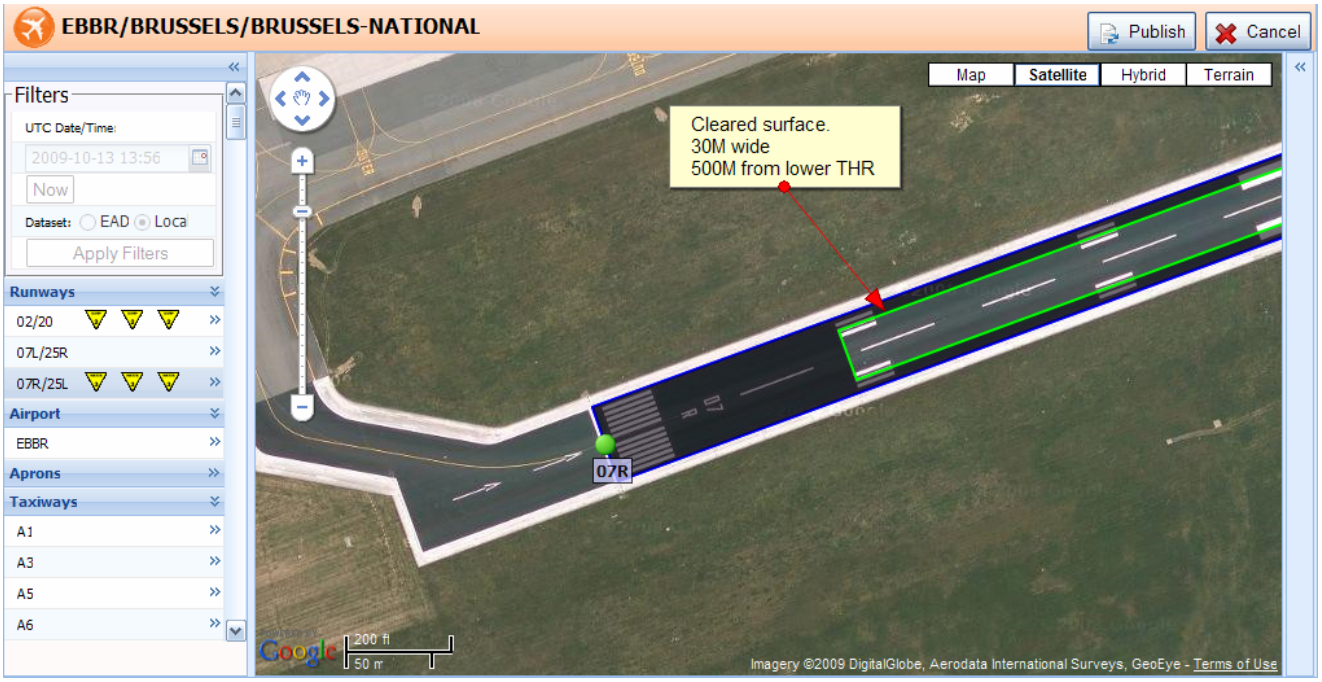
7.7.1 Cleared surface

The Cleared Surface field set supports the encoding of cleared length, width and side (items D and E respectively).



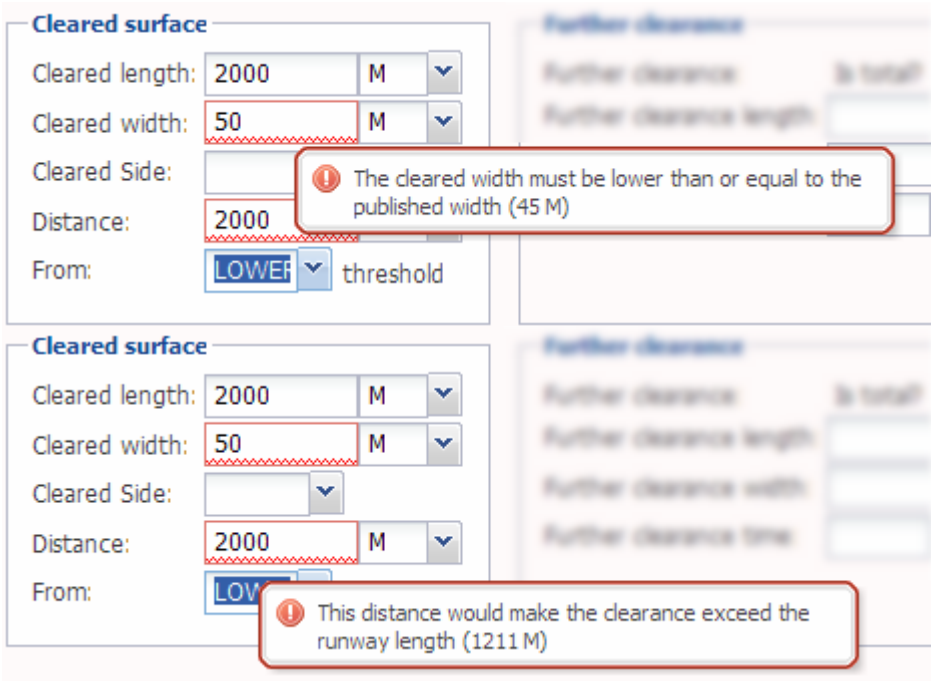
The cleared width and length will be exported "as is" in the ICAO SNOWTAM Draft. You may choose any unit of measurement (they will be converted in concordance to ICAO SNOWTAM needs).

The application goes however further than the ICAO requirements. It also supports encoding a distance from a threshold, which will allow drawing the cleared area on the map (when runway geometry is available)!



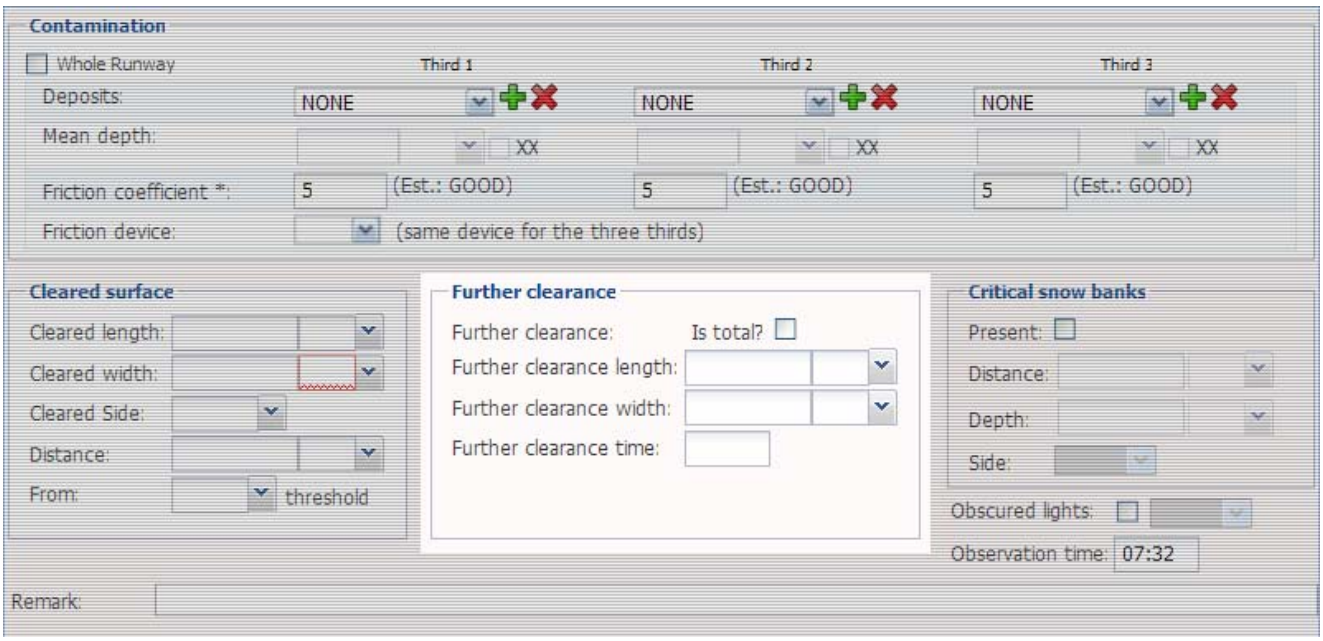
Note: the cleared surface is outlined with a green line.

When runway width and length are available from EAD, the application will also be able to validate the cleared surface.


Cleared surface
Cleared length: 2000 M
Cleared width: 50 M
Cleared Side:
Distance: 2000
From: LOWER threshold
The cleared width must be lower than or equal to the published width (45 M)
Cleared surface
Cleared length: 2000 M
Cleared width: 50 M
Cleared Side:
Distance: 2000 M
From:
This distance would make the clearance exceed the runway length (1211 M)

7.7.2 Further clearance

The further clearance field set supports the encoding of items L & M.



A total further clearance is indicated by clicking on the checkbox nearby "Is total?" In this case, length and width fields will become disabled.

When distances are provided, the corresponding unit of measurement must be provided as well.

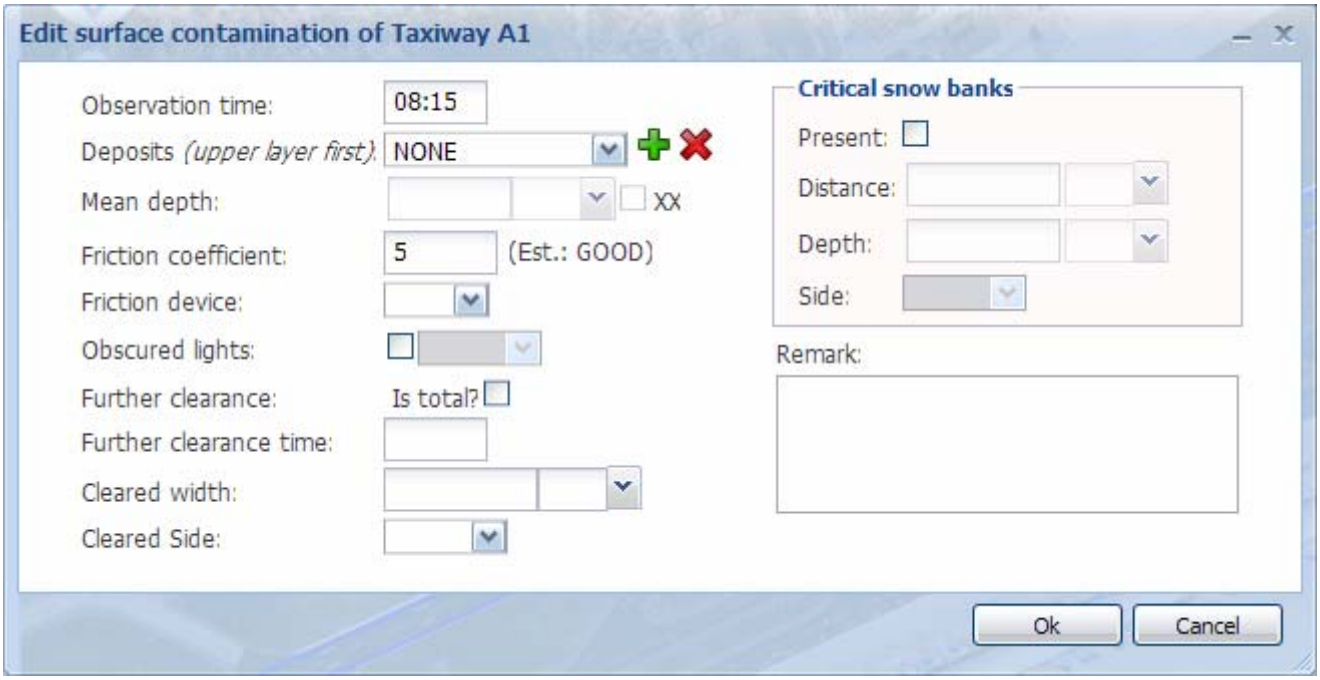
7.7.3 Critical snow banks and obscured lights

The "critical snow banks" field set, which is common to all feature types, is described in chapter "7.6.7 Critical ", page 52.

The "Obscured lights" fields, which are common to all feature types, are described in chapter "7.6.8 Obscured lights", page 52.

7.8 Editing/Creating Taxiway contaminations

This dialog allows creating and editing contaminations for taxiways. It contains all the common fields described in chapter "**Error! Reference source not found. Error! Reference source not found.**" on page **Error! Bookmark not defined.**.

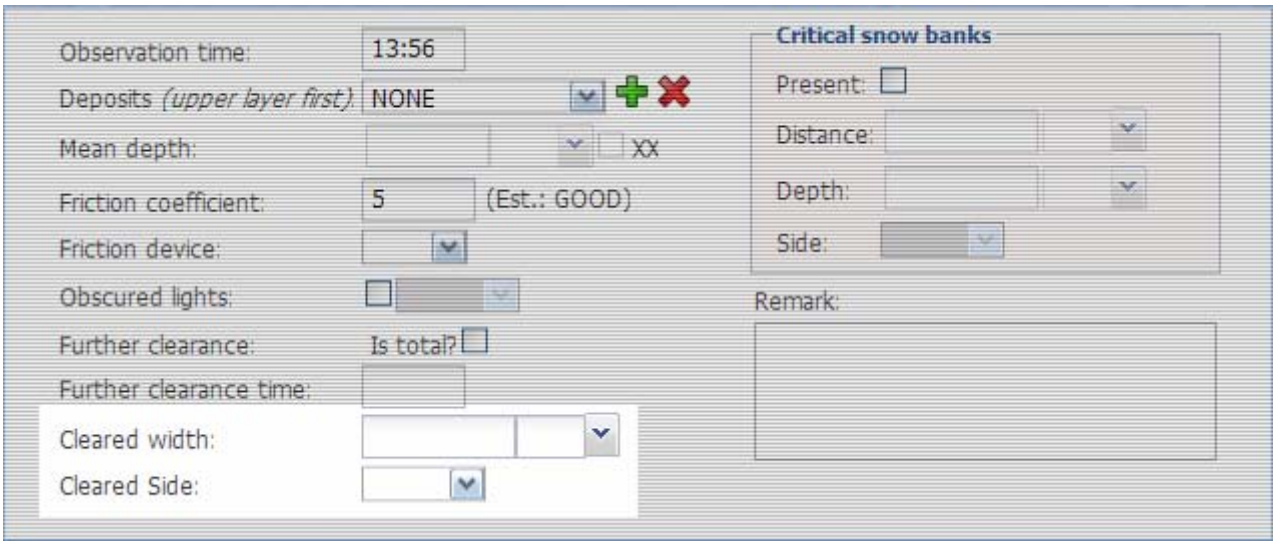


Most fields have been described in chapter "**Error! Reference source not found. Error! Reference source not found.**", on page **Error! Bookmark not defined.**.

7.8.1 Cleared width and side

The cleared width of the taxiway may be specified here.

Enter a distance and select a unit of measurement.

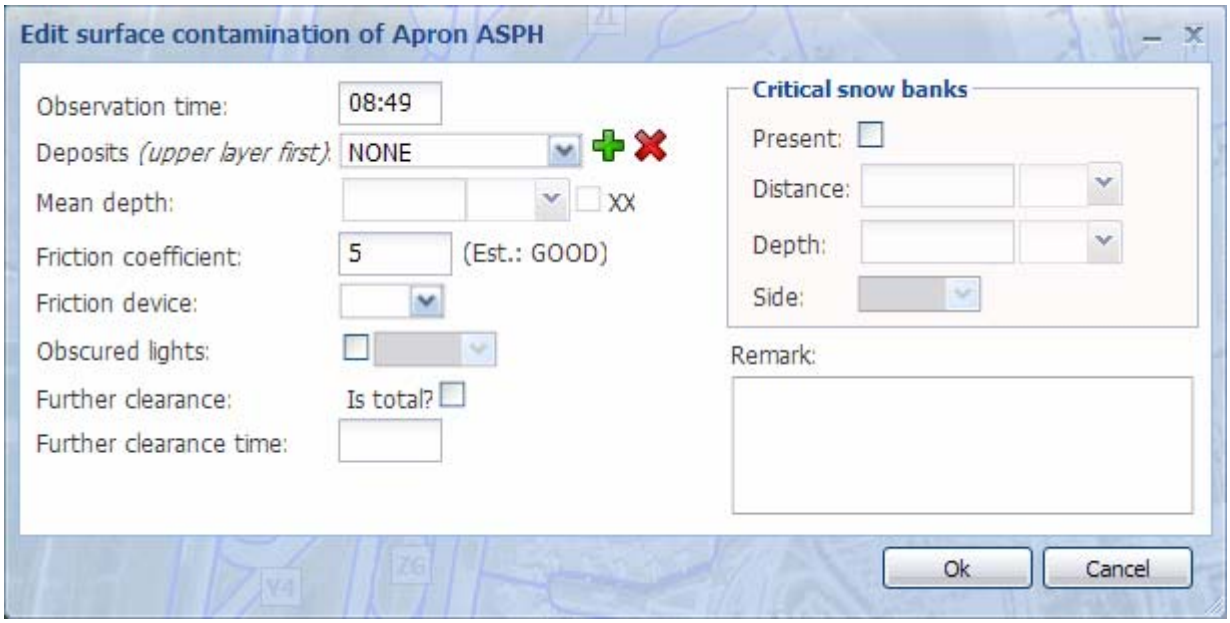


LLS/EPR: There are on-going discussions on the AIXM forum about utility of the "cleared side" field.

7.9 Editing/Creating Apron contaminations

There are two ways to create aprons contaminations. The apron can be marked as contaminated in whole, like any other features. The application also supports drawing a custom surface on aprons, to mark only a part of it as contaminated.

Whatever the way the contamination is created, the resulting edition dialog will be the same:



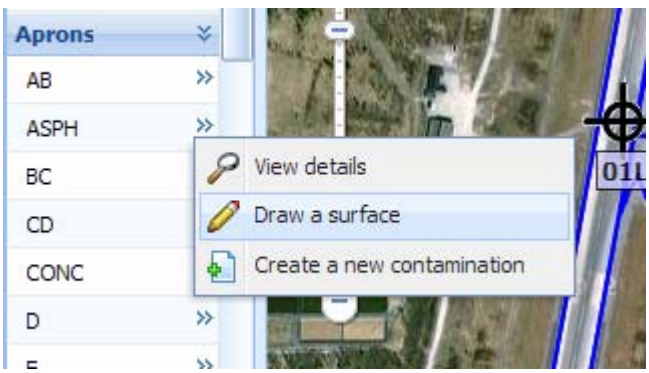
All the fields of this dialog are described in chapter "**Error! Reference source not found. Error! Reference source not found.**", on page **Error! Bookmark not defined.**.

7.9.1 Drawing custom apron surfaces

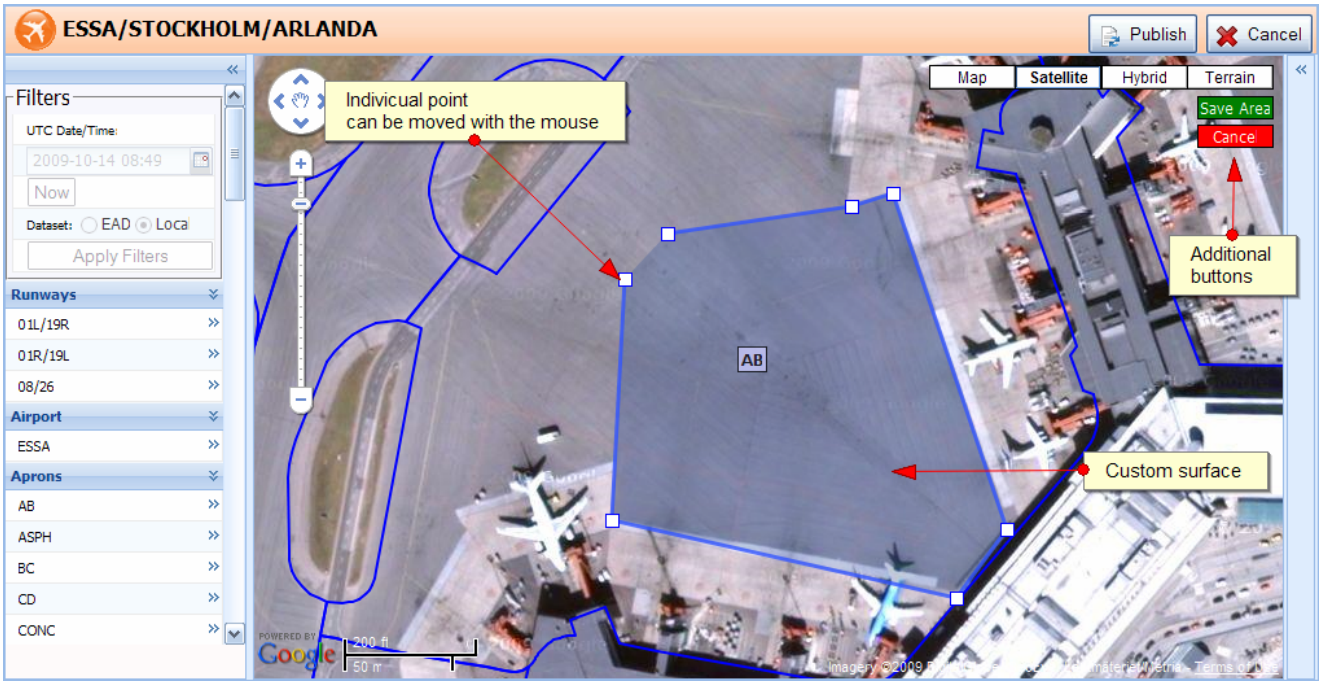
Drawing a custom surface on an apron allows you to restrict the contamination to a specific area on the corresponding apron.

> ***Tip:*** *for airports without AMDB data, this functionality also allows you to specify a surface for the corresponding apron that can then be exported in AIXM.*

This feature is accessible though the menu:



When you select "Draw a surface", the screen switches to the drawing mode. In this mode, you can draw a surface on the map by clicking on different points (one point at a time). Two additional buttons also become available: "Save area" and "Cancel".



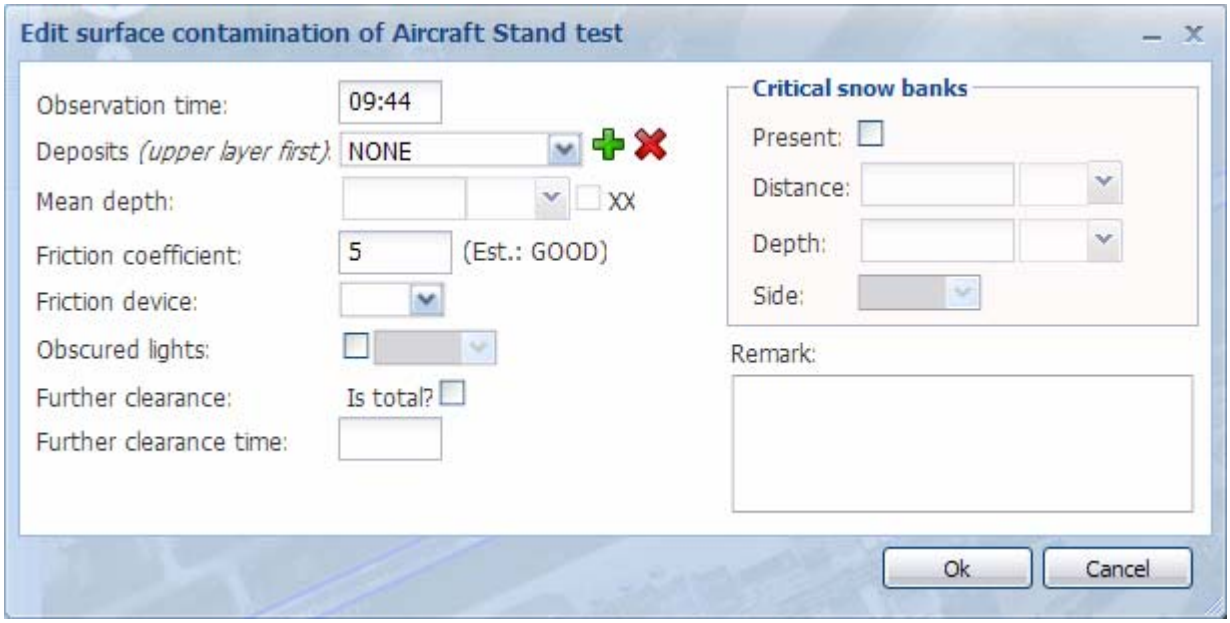
Points are displayed as square shaped icons, which can be moved with the mouse. Simply click on the square, hold the mouse button, and move the cursor.

Once the area has been defined, click on the "Save area" button. This will open the contamination edition dialog for the corresponding surface.

> **Note:** it is not necessary to close the polygon as it will be closed automatically by the application upon save

7.10 Editing/Creating Aircraft Stand contaminations

This dialog allows creating/editing contaminations on aircraft stands.

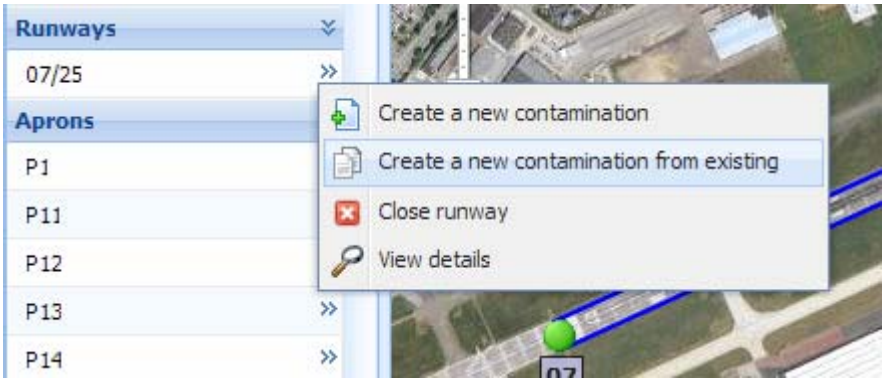


All the fields of this dialog are described in chapter "**Error! Reference source not found. Error! Reference source not found.**", on page **Error! Bookmark not defined.**.

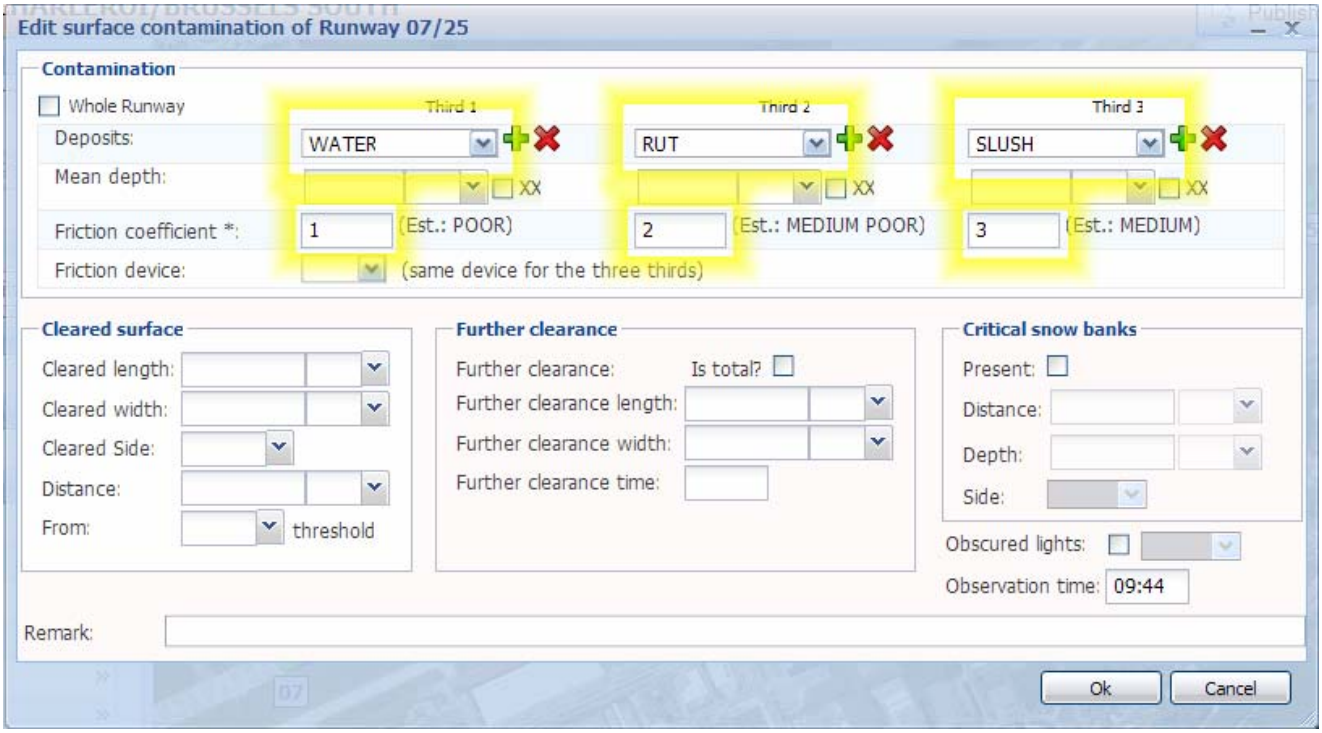
7.11 Creating contaminations from existing

When in new observation mode, and if a SNOWTAM currently exists on the selected airport, it is possible to create a new contamination based on the existing one (instead of creating it from scratch).

By default, the new SNWOTAM is empty: the existing contaminations are not retrieved. You will have to retrieve the interesting contaminations feature by feature in order to build the new SNOWTAM.



This will open the contamination dialog pre-filled with the values of the previous observation:



7.12 Publishing an observation

Once all the contaminations have been created, click on the "Publish" button in the upper right corner.

The application will generate the following:

- ICAO SNOWTAM Draft
- full text SNOWTAM
- AIXM timeslices
- KML export that can be opened with Google Earth

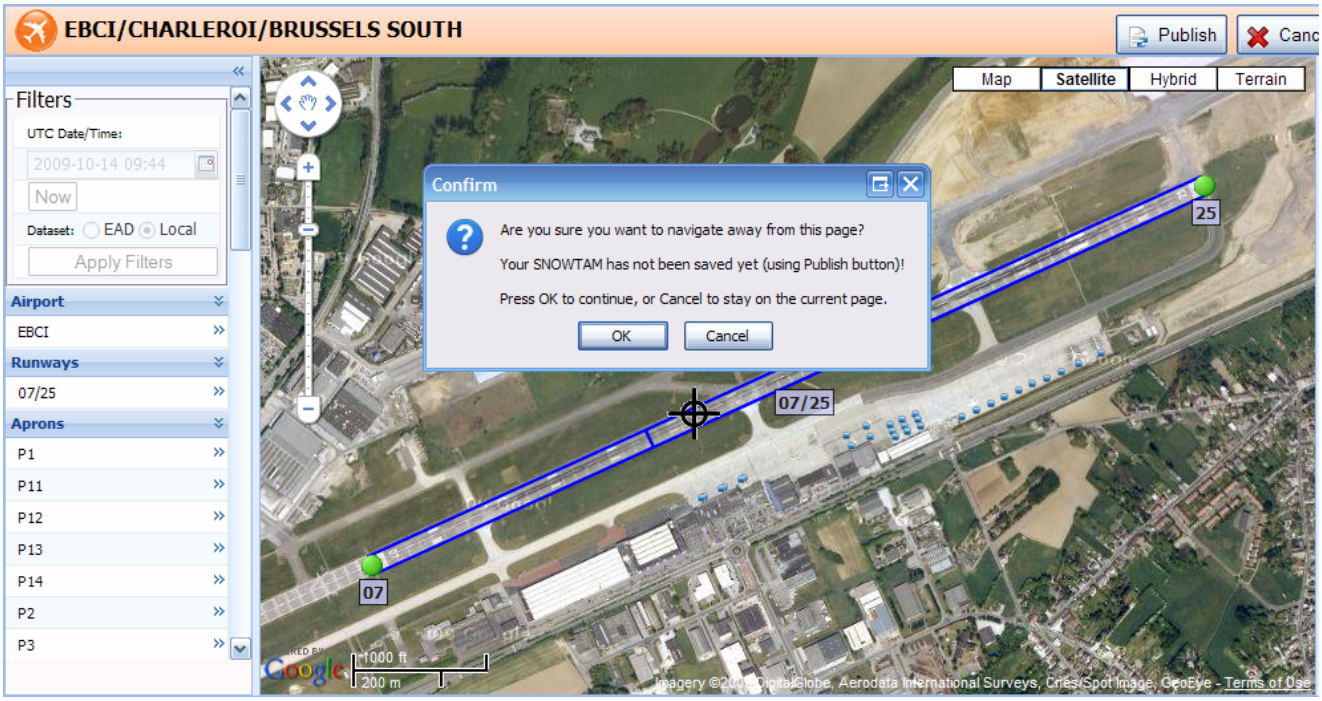
Note: Publishing observations may take a while.

Once the observation has been published, the application will reload the Airport Map page in view mode.

7.13 Cancelling an observation

The current observation can be cancelled by clicking the "Cancel" button in the upper right corner.

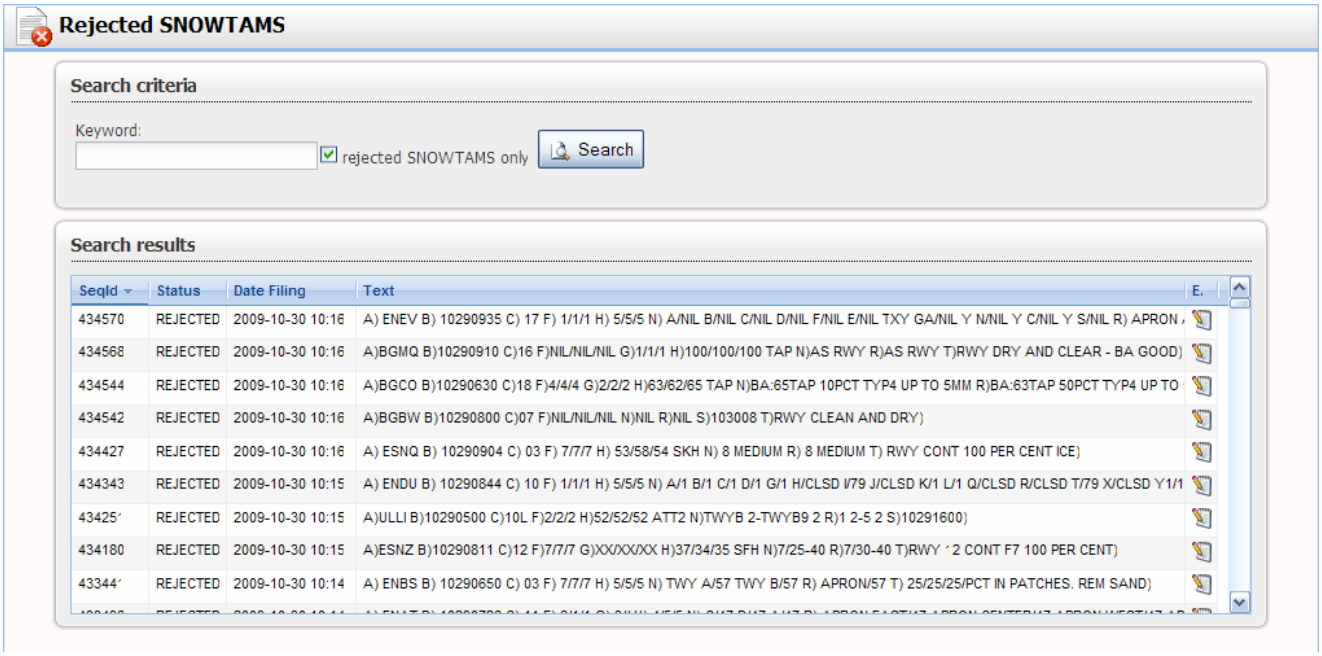
The application will ask for a confirmation before discarding the observation.



Once you confirm the cancelling, the application will reload the Airport Map page in view mode. Nothing will have been stored in database.

7.14 Manage rejected SNOWTAMs

As Data Provider, you also have access to the "Rejected SNOWTAMs" screen, which allows you to fix any errors that prevented the EAD SNOWTAM Messages to be automatically processed by the application.


Rejected SNOWTAMS
Search criteria
Keyword:
rejected SNOWTAMS only
Search
Search results
SeqId
Status
Date Filing
Text
E.
434570 REJECTED 2009-10-30 10:16 A) ENEV B) 10290935 C) 17 F) 1/1/1 H) 5/5/5 N) A/NIL B/NIL C/NIL D/NIL F/NIL E/NIL TXY GA/NIL Y N/NIL Y C/NIL Y S/NIL R) APRON
434568 REJECTED 2009-10-30 10:16 A)BGMQ B)10290910 C)16 F)NIL/NIL/NIL G)1/1/1 H)100/100/100 TAP N)AS RWY R)AS RWY T)RWY DRY AND CLEAR - BA GOOD)
434544 REJECTED 2009-10-30 10:16 A)BGCO B)10290630 C)18 F)4/4/4 G)2/2/2 H)63/62/65 TAP N)BA:65TAP 10PCT TYP4 UP TO 5MM R)BA:63TAP 50PCT TYP4 UP TO
434542 REJECTED 2009-10-30 10:16 A)BGBW B)10290800 C)07 F)NIL/NIL/NIL N)NIL R)NIL S)103008 T)RWY CLEAN AND DRY)
434427 REJECTED 2009-10-30 10:16 A) ESNQ B) 10290904 C) 03 F) 7/7/7 H) 53/58/54 SKH N) 8 MEDIUM R) 8 MEDIUM T) RWY CONT 100 PER CENT ICE)
434343 REJECTED 2009-10-30 10:15 A) ENDU B) 10290844 C) 10 F) 1/1/1 H) 5/5/5 N) A/1 B/1 C/1 D/1 G/1 H/CLSD I/79 J/CLSD K/1 L/1 Q/CLSD R/CLSD T/79 X/CLSD Y1/1
43425' REJECTED 2009-10-30 10:15 A)ULLI B)10290500 C)10L F)2/2/2 H)52/52/52 ATT2 N)TWYB 2-TWYB9 2 R)1 2-5 2 S)10291600)
434180 REJECTED 2009-10-30 10:15 A)ESNZ B)10290811 C)12 F)7/7/7 G)XX/XX/XX H)37/34/35 SFH N)7/25-40 R)7/30-40 T)RWY ' 2 CONT F7 100 PER CENT)
43344' REJECTED 2009-10-30 10:14 A) ENBS B) 10290650 C) 03 F) 7/7/7 H) 5/5/5 N) TWY A/57 TWY B/57 R) APRON/57 T) 25/25/25/PCT IN PATCHES. REM SAND)

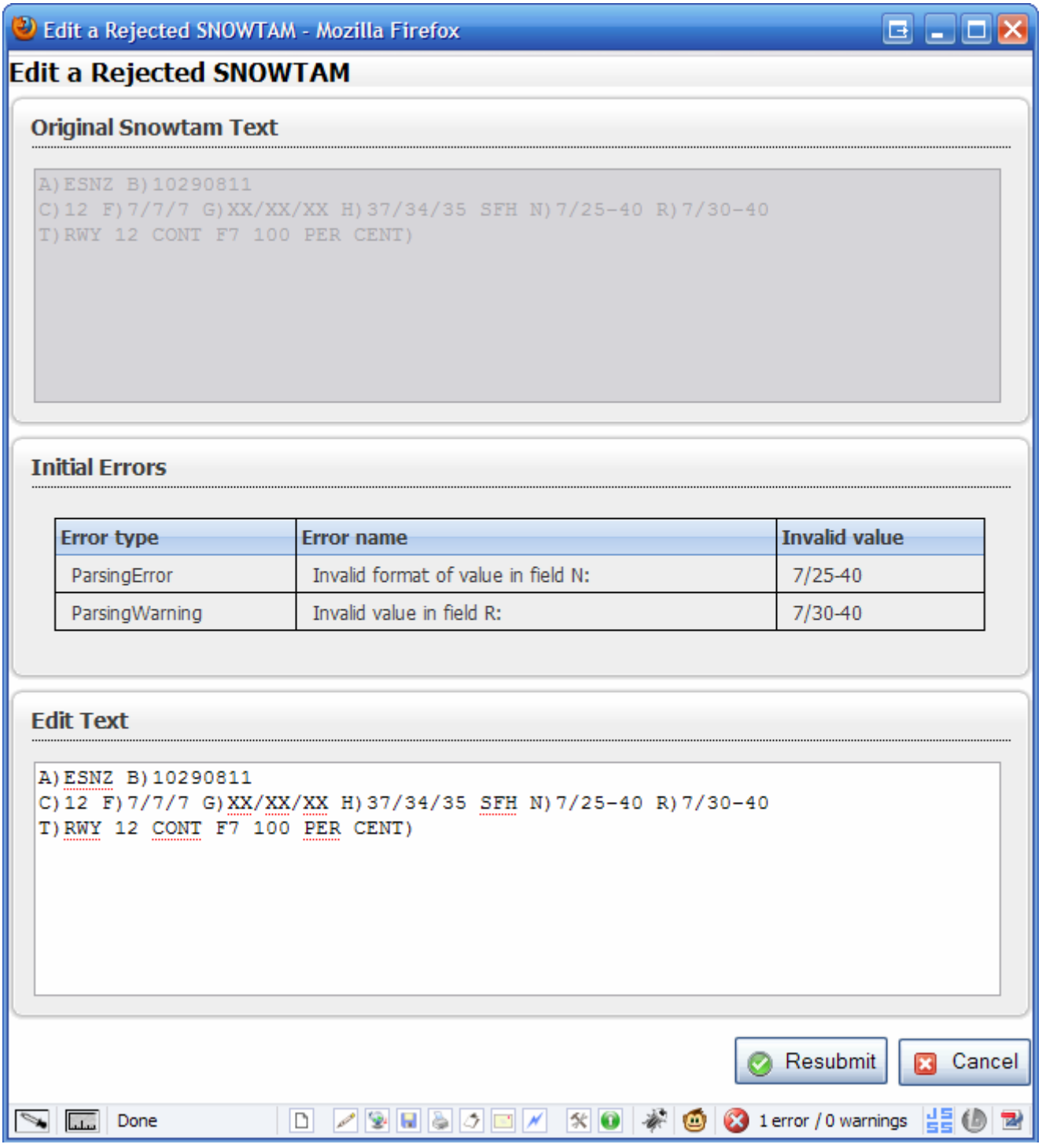
Click on the icon or double-click on a grid row to open the "Edit rejected SNOWTAM" popup for the corresponding SNOWTAM message.

7.14.1 Search criteria

By default only rejected SNOWTAM messages are displayed. It is however possible to display all SNOWTAM messages by unchecking the "rejected SNOWTAMS only" checkbox.

It's also possible to limit the list to SNOWTAMS containing a specific keyword entered in the "Keyword" field (this is a full text search).

7.14.2 Editing a SNOWTAM Message



The screen is divided into three sections.

The "**Original SNOWTAM Text**" contains the SNOWTAM Message as it was received from EAD or previously resubmitted within the application. The field is read only as it serves only as a reference for the edited text.

Initial Errors are validation messages generated by the parsing of the SNOWTAM. The various types of errors are discussed in paragraph "7.14.4 Types of errors" below. Errors must be fixed; otherwise the SNOWTAM will be rejected again. Warning should be fixed, but this is not mandatory.

The "**Edit Text**" allows you to clean up the SNOWTAM Text before resubmitting it.

When you click on the "Resubmit" button, the edited SNOWTAM text will be completely reprocessed, parsed and validated by the application.

The popup will close itself and the search results will be refreshed. The original SNOWTAM message will be given an "updated" status. If the new SNOWTAM contained errors, it will appear in the list with a "rejected" status.

Clicking on the "Cancel" button will close the popup without warning. Any modification made in the "Edit Text" section will be lost (nothing will be saved in database).

7.14.3 Statuses

SNOWTAM message may be in the following statuses:

- Rejected: the application was not able to process the message automatically
- Accepted: the message has been processed and converted to contaminations
- Updated: a rejected message has been fixed and replace by a newer version by using the application

7.14.4 Types of errors

Problems encountered during automatic parsing of EAD SNOWTAMS can be of the following types:

- ParsingWarnings
- ParsingErrors
- ConversionErrors

ParsingErrors happen when the application is not able to parse the SNOWTAM due to erroneous syntaxes..

ParsingWarnings spot deviations from ICAO standard or values that cannot be understood correctly by the application, but that do not prevent it to process the SNOWTAM. Messages with Warnings only are not rejected and are available as usual in the Airport Overview and Airport Map pages.

ConversionErrors happen when syntactically valid SNOWTAM messages refer to unknown features (runways, airports,...)

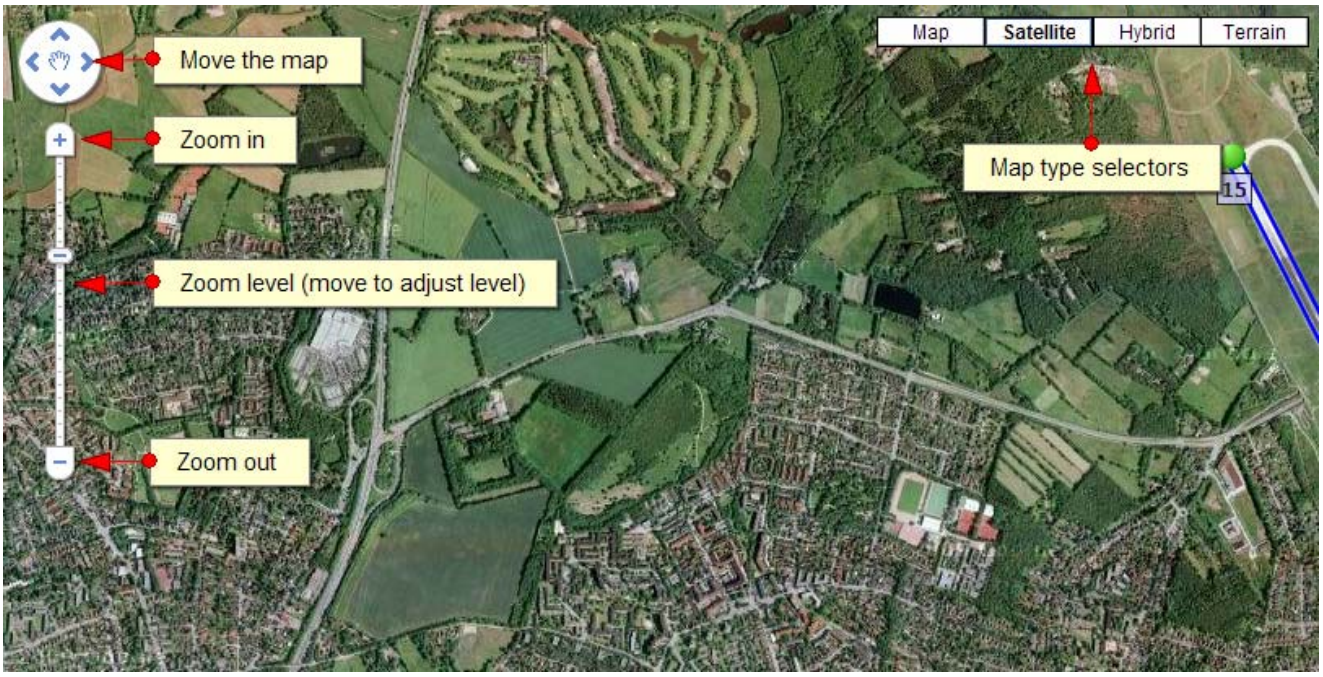
E**rrors** prevent the application from handling the SNOWTAM message, which will then be rejected.

A SNOWTAM containing only **warnings** will be processed normally by the application. Note however that some information it contains could be generalized. For example unreadable information

about taxiways could be put at the airport level during the creation of contaminations. The information is not lost, but is available at a higher level.

8 Working with Google Maps

Here are a few condensed things to know about Google Map usage.



8.1 Moving the map

The map can be moved:

- By using the map control on the left (as explained in the screenshot)
- By using drag & drop (click on the map, keep the mouse button down and move the cursor to move the map).
- By using the arrows, [Page Up], [Page Down], [Home] and [Insert] keys on the keyboard

The map can also be centred on a specific place by double-clicking on the corresponding point on the map.

Clicking on the little hand icon in the map control will move the map back to the last known position.

> **Note**: In the Airport Map Page, the map can be centered on a feature by clicking on the corresponding feature in the textual feature list (provided that a geometry is available for that feature).

8.2 Zooming the map

The map can be zoomed in and out:

- By using the map control on the left (as explained in the screenshot)
- By using the mouse wheel (if your mouse has one)
- Use the [Insert] key to zoom out

A double-click anywhere on the map will centre it on the clicked point.

8.3 Choosing a map type

Choosing a map type is as easy as clicking on the select type in the upper-right corner of the map.

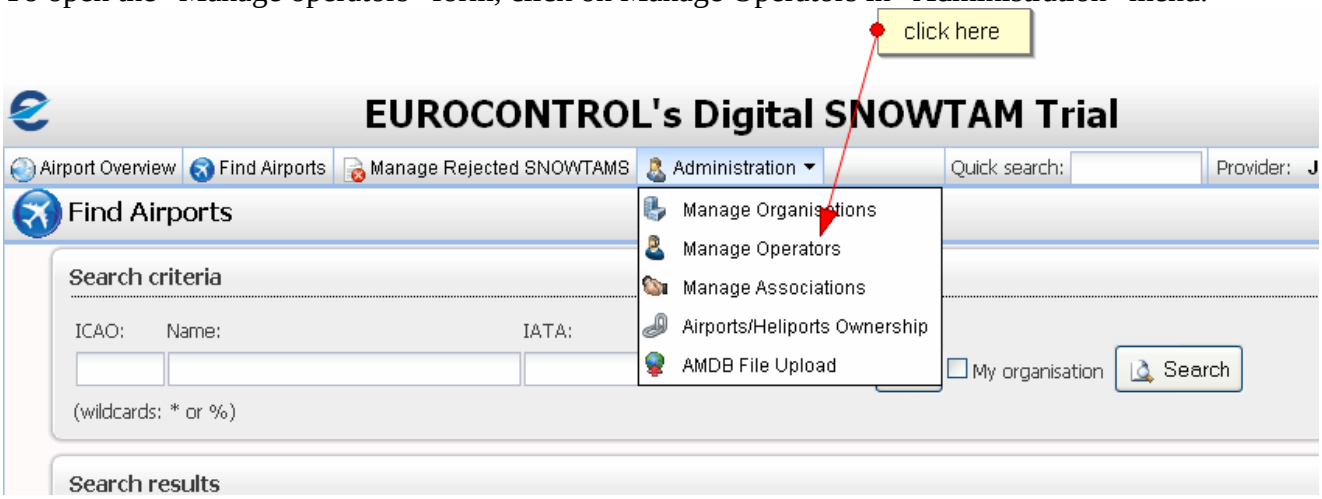
As map types add a real value to this application, they are further explained in chapter "6.6.4 Visualization Options" on page 35.

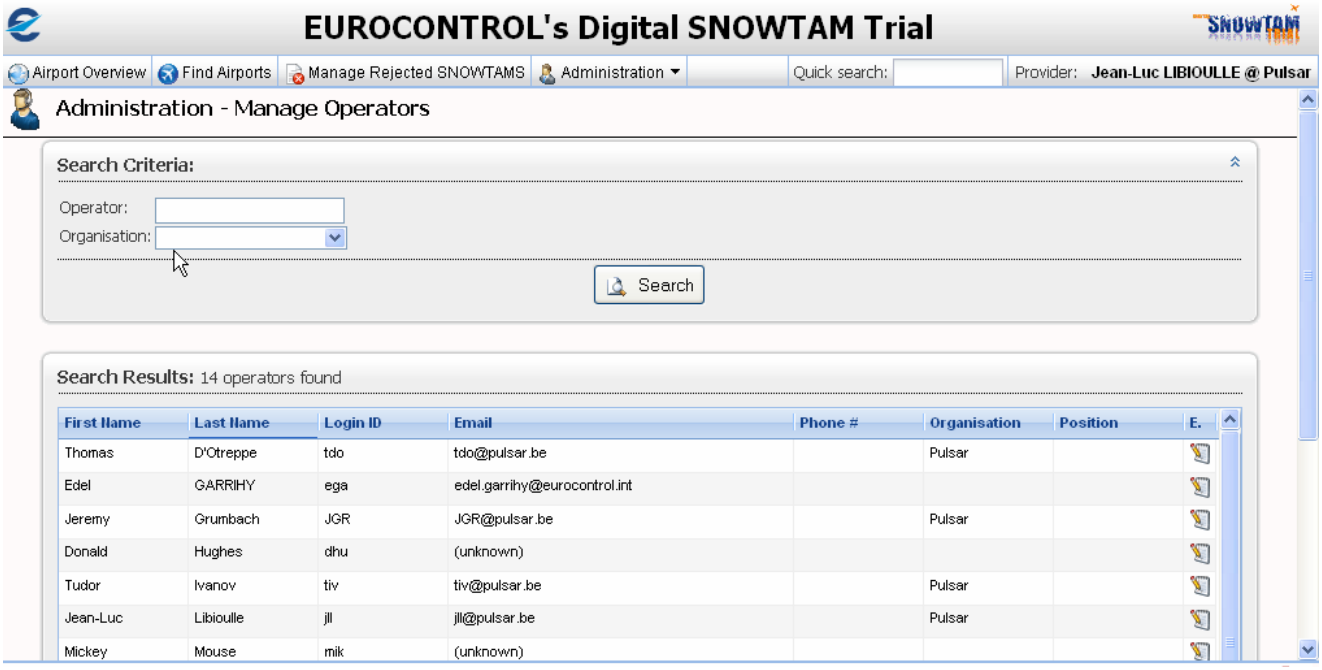
The application has the capability to retain the selected map type for next time the map is displayed.

9 Administration

9.1 Manage Operators

To open the "Manage operators" form, click on Manage Operators in "Administration" menu.





9.1.1 Search

The Search button allows for retrieving operators matching the optional search criteria specified in Operator field and/or in Organisation field.

Operator: can be a last name for an exact match or a pattern of last name using % as wildcard character.
Organisation: is a combo box in which one organisation can be selected.

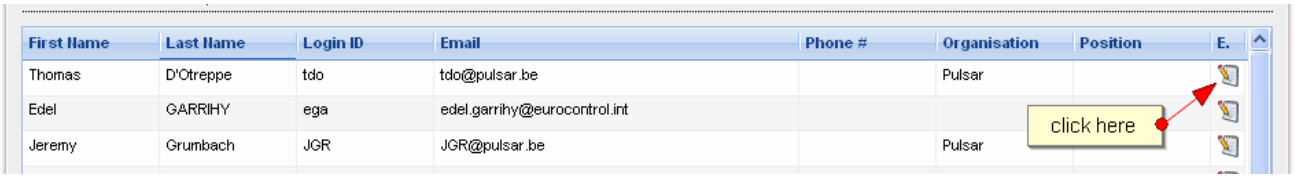
Results are presented in a Search result table, one operator per row.

A double-click anywhere in a row or a single-click on the Edit icon opens up the operator editor form in a popup windows (see 9.1.3 below)

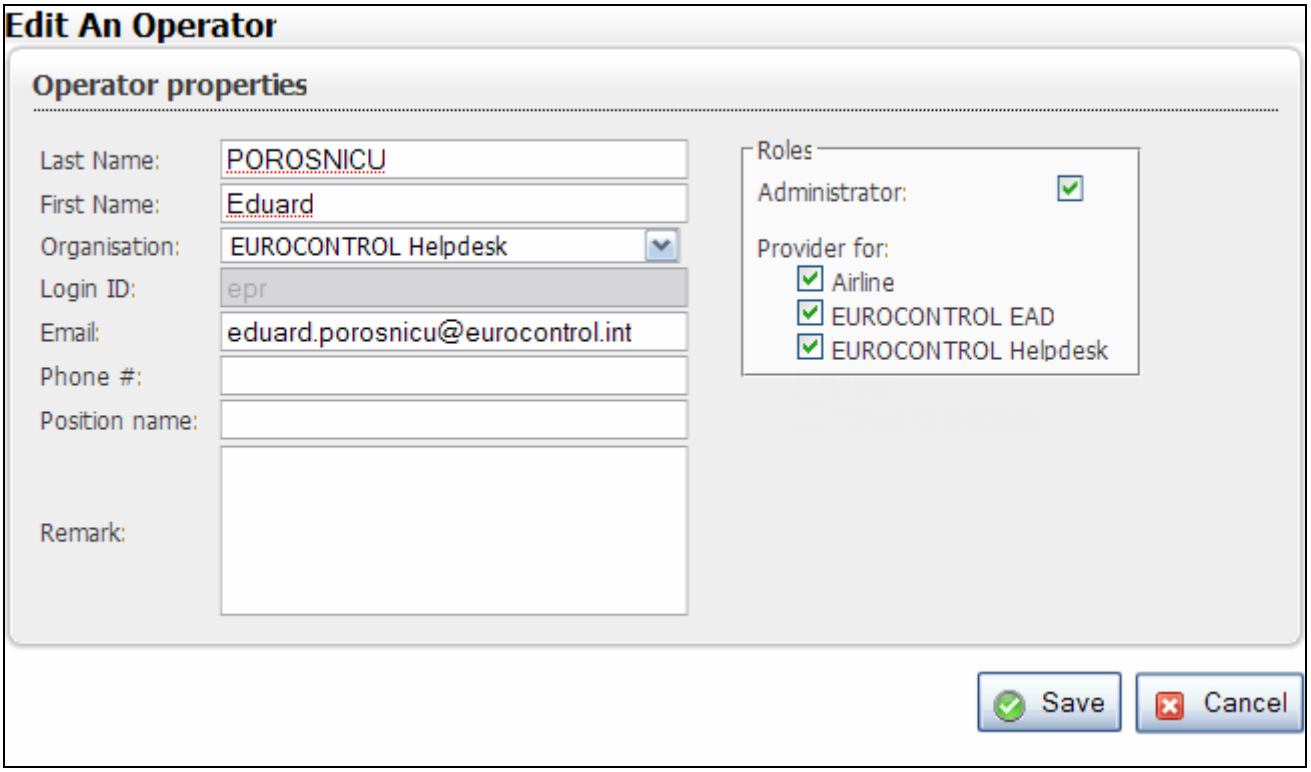
9.1.2 Add

9.1.3 Edit

To edit an operator, double-click on the operator row or single-click on the icon to the right end of the row.



A popup window opens up showing the operator data.



Since the login id is not managed within the application, it's read-only.

In order to be able to use the application, an operator must be associated with a parent organisation. The Organisation field, on the left part of the popup, serves this purpose. **This will give the operator Data User access rights**. Note that the Data User role gives read-only access to all airports and SNOWTAM messages of the application.

An operator can also be given the Data Provider role for zero, one or multiple organisations. This will give him the right to create/edit SNOWTAM messages for all airports owned by the selected organisations. In the list below "Provider for", check the organisations for which you want the operator to be provider for. You may also uncheck organisations for which you want to remove the "Provider for" privilege.

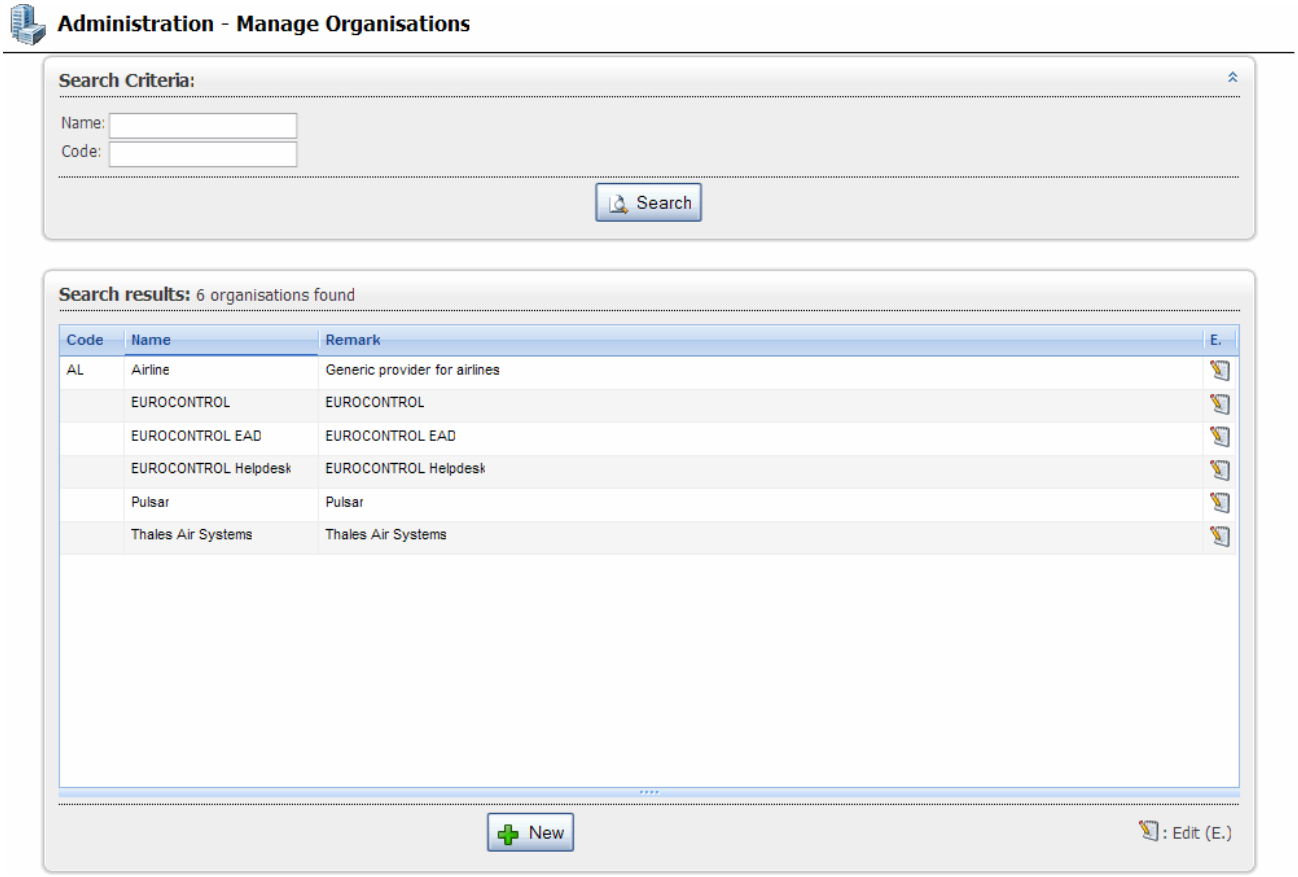
The Administrator role gives the right to:

- create and edit operators
- create and edit organisations
- upload AMDB files

To save changes, click on Save. To abandon changes, click on Cancel. In this case, there's no confirmation dialog prior to closing the editor and loosing the changes.

9.2 Manage Organisations

This screen allows you to search, add and editing existing organisations.

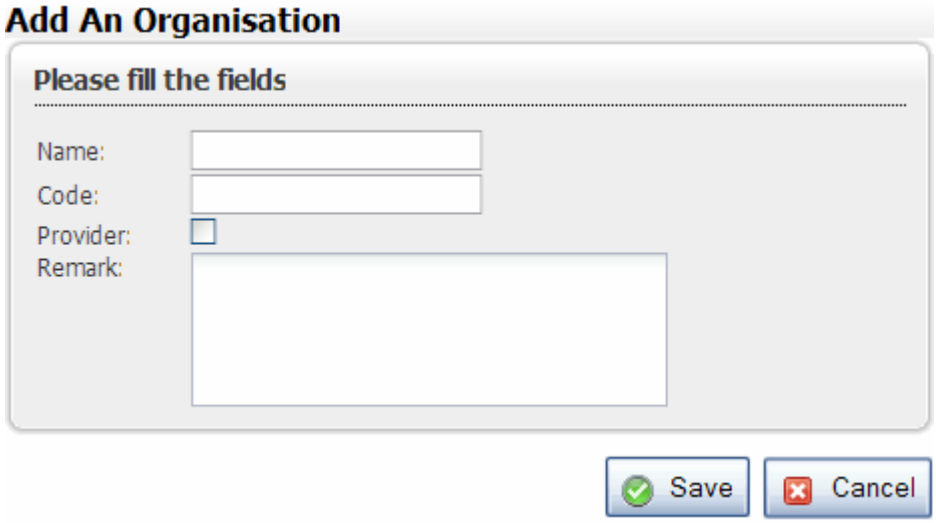


9.2.1 Search

You can search for organisations by name and/or by code. Both fields support the '*' wildcard character. Click on the 'Search' button or hit the [Return] key when one of the fields has focus to perform the search.

9.2.2 Add

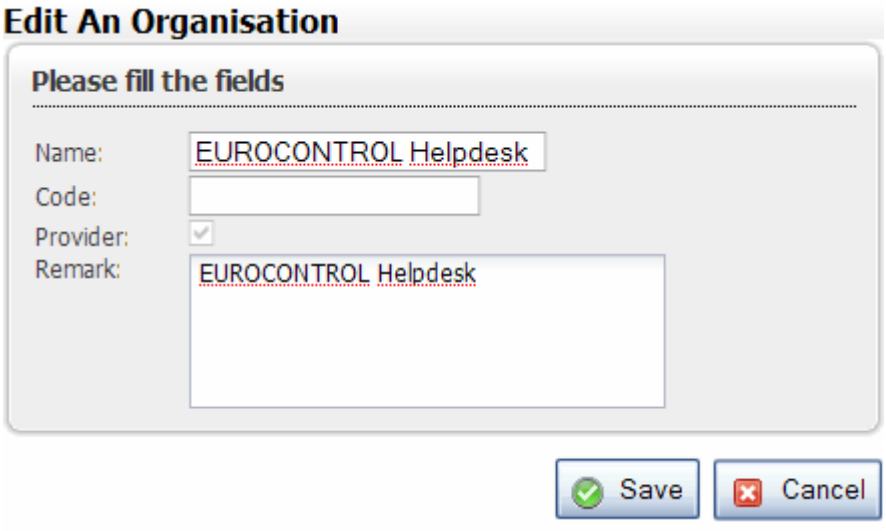
Click on the 'New' button to add a new organisation. This will open the "Add an organisation" popup:



Check the 'Provider' checkbox if the new organisation is a provider.

9.2.3 Edit

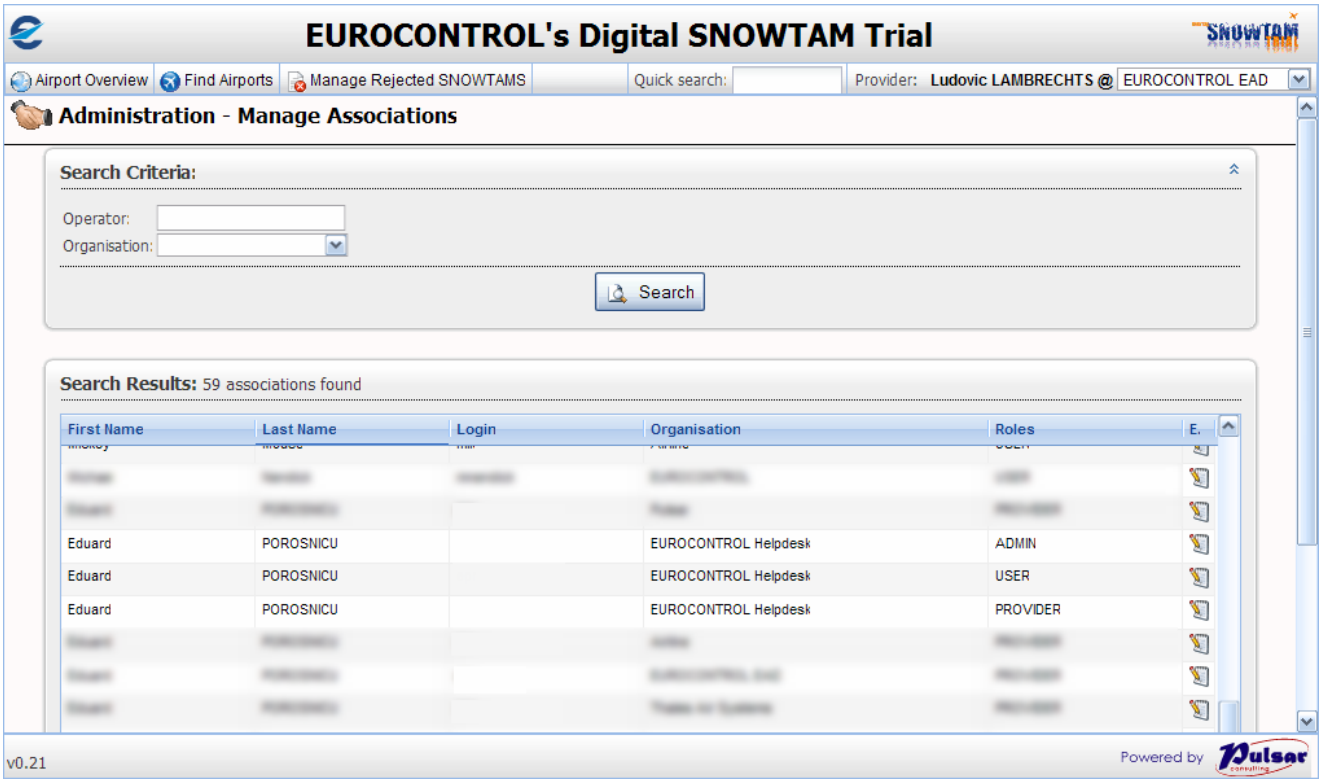
Click on the icon or double-click on a grid row to open the "Edit an organisation" popup for the corresponding organisation:



Notice that once an organisation has been saved as provider, this cannot be undone.

9.3 Manage Associations

This screen allows viewing (and managing) all the relationships between operators and organisations.



9.3.1 Search

The operator field allows searching for operator based on first name, last name, login and email. It supports the '*' wildcard character.

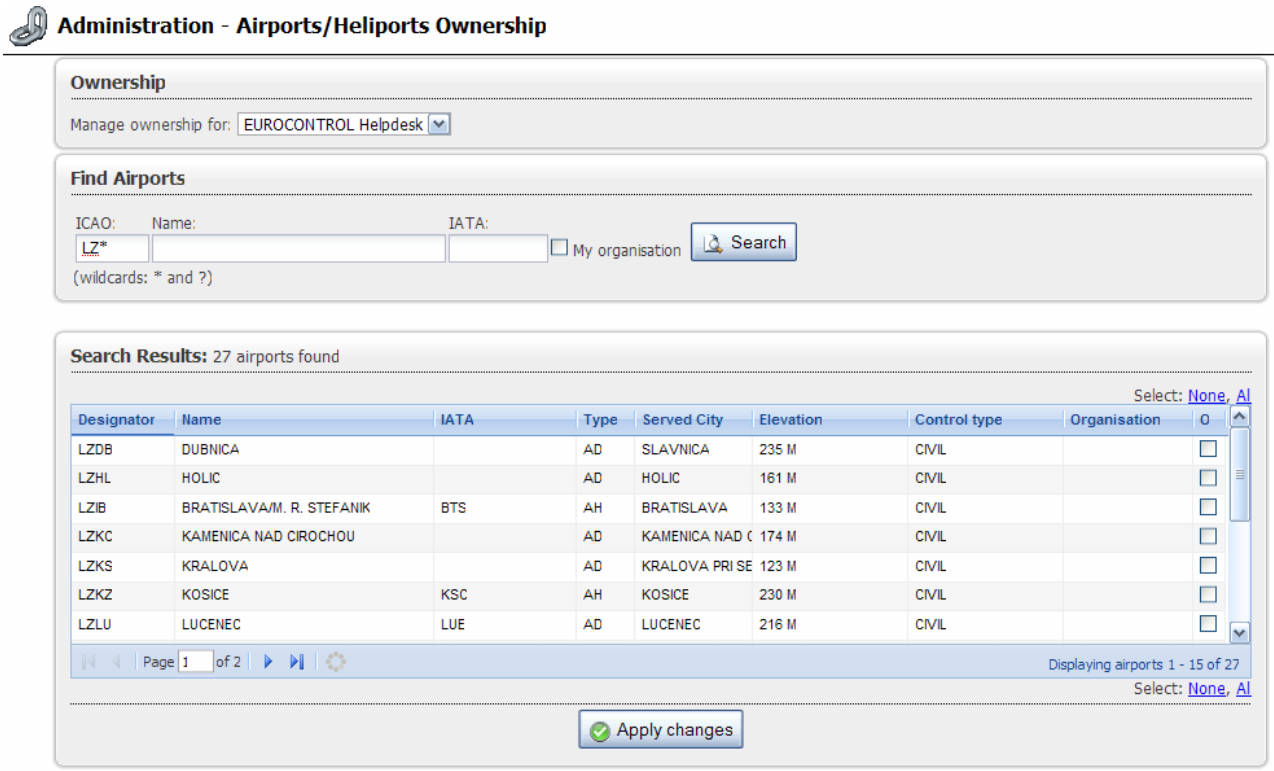
The organisation list allows selecting one particular organisation to restrict the search.

Clicking on the icon or double-clicking on the row will open the 'Edit operator' popup window, which will allow you to edit those associations.

9.4 Airport/heliport ownership

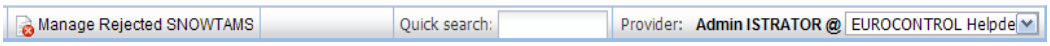
Airport/heliport Ownership allows selecting for which airports an organisation and its data providers can create/edit Digital SNOWTAMs.

Shared ownership is supported, meaning that an airport/heliport can be owned by multiple organisations at the same time. This allows for example national authorities to encode SNOWTAM messages in place of local authorities when needed.


Administration - Airports/Heliports Ownership
Ownership
Manage ownership for: EUROCONTROL Helpdesk
Find Airports
ICAO: Name: IATA:
LZ*
My organisation
Search
(wildcards: * and ?)
Search Results: 27 airports found
Select: None, Al
Designator Name IATA Type Served City Elevation Control type Organisation O
LZDB DUBNICA AD SLAVNICA 235 M CIVIL
LZHL HOLIC AD HOLIC 161 M CIVIL
LZIB BRATISLAVA/M. R. STEFANIK BTS AH BRATISLAVA 133 M CIVIL
LZKC KAMENICA NAD CIROCHOU AD KAMENICA NAD C 174 M CIVIL
LZKS KRALOVA AD KRALOVA PRI SE 123 M CIVIL
LZKZ KOSICE KSC AH KOSICE 230 M CIVIL
LZLU LUCENEC LUE AD LUCENEC 216 M CIVIL
Page 1 of 2
Displaying airports 1 - 15 of 27
Select: None, Al
Apply changes

Ownership is always managed for one organisation at a time, which can be selected in the 'Ownership' section (top of page).

> **Note**: the organisation selected in the main menu has no effect on this screen, as ownership is an administrative task not related to Data Providers/Users.



9.4.1 Search

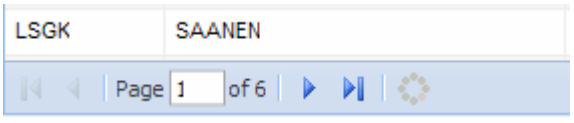
Search fields supports both '%' and '*' wildcard characters. You can also restrict the search to the airports already owned by the selected organisation.

9.4.2 Take/Release ownership

Taking and releasing ownership is done by checking and unchecking (respectively) the checkbox in the left-most column of the search results.

The actions will be saved once you click on the Apply Changes button.

> **Note**: search results may be split in multiple pages (as shown in the following screenshot).



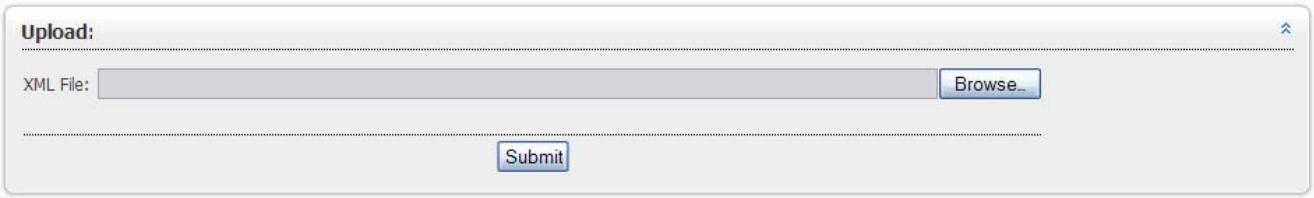
> "Apply Changes" only applies to the **current page**. If you navigate to another result page, any modification you have made will be lost.

9.5 AMDB file upload

The application allows an administrator to upload an AMDB file in the database. This feature is available from the Administration menu.

> **Important notice**: the administrator must provide a single AMDB file containing all available data. This is necessary because the application doesn't support incremental upload of AMDB data. Due to AMDB specific constraints, the existing data is deleted from the database before the file is uploaded.

9.5.1 Upload a new file



Click on the 'Browse' button to select the file to upload from your computer then click on 'Submit' to send it to the application.